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SOCIAL CLASS DIFFERENCES IN MOTHER'S SPEECH IN KOREA

by

SOO-HYANG CHOI

C

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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Date Aug. 14, 1985

To my Father and Mother

ABSTRACT

It was intended to examine the social class difference in mother's speech in Korea. Main concern was to characterize the speech patterns of Korean mothers of different social groups and to determine the differential effects of each speech pattern on the child's language development.

20 mother-child pairs were drawn from high and low social class groups in Seoul, Korea. The children's age ranged from 25 to 34 months. 30 minutes of communicative interaction between mother and child were recorded under bookreading and toyplaying situations. Mother's speech samples were transcribed and scrutinized in terms of the facilitative features of mother's speech: informational properties, interpersonal functions, and conversational turntaking.

It was noted that Korean HC (High Class) mothers showed higher proportions in the facilitative features of mother's speech than LC (Low Class) mothers. The HC mothers tended to produce more semantically related speech; they were more likely to explicate and elaborate the child's prior utterances in interpersonal level. Also, they were more likely to incorporate the child's prior turn in maintaining a conversational chain. On the whole, like Western HC mothers, Korean HC mothers produced more responsive talk than the LC mothers. It was assumed that Korean HC mothers provided a far better linguistic environment for the child's language development and the facilitative environment basically bore the mother's responsive attitude. But unlike Western LC mothers, Korean LC mothers were found not inactive in interacting with their children. Different social and cultural background between the two groups of LC mothers were claimed responsible for the difference. Implications involved the interrelation between mother's speech and the social, cultural background, and the interactive nature of child's language development.

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I. INTRODUCTION

A. Overview of the Problem

The main purpose of the present study was to examine the Social Economic Status (SES) differences in mother's speech in Korea.[1] Many past discussions of the effects of social class upon mother's speech have been primarily based upon Western societies. In fact, the development of interest in the effects of social class has started as part of the attempts to solve the problems that Western societies have faced. For instance, poor linguistic and cognitive performances of disadvantaged children in America have disseminated numerous research on the effects of SES differences on the child's development. Bernstein's observation of different linguistic codes among members from different social class groups was another monumental study from which a number of studies have been generated to examine the relationship between social class and linguistic codes. Recently, with the growing concern about the importance of mother's speech on a child's language development, interest has been switched to the effects of SES differences on the mother's speech style.

One of the handicaps of these studies is that the implications of the findings are relevant only to Western societies. There is reason to believe that the characteristics of Western mother's speech may not be typical of mothers in other cultural groups. Mother's speech style or communicative pattern is essentially a social phenomenon. It mirrors the social or cultural background that a mother encounters. In Japan, for instance, mothers have a fundamentally different attitude toward the social position of child. Mothers maintain the social position of the child as a child more strictly. This type of attitude leads mother to be more tolerant of the child's dependency on the mother and with deviant utterances of the child (Fischer, 1970). In Luo, the mother is the primary caretaker of the infant for the first few months and subsequently other members of the family, like older siblings, quickly assume the responsibility of the caretaker. In such society, even a mother is not the major social agent to the child.

---

[1]Basically, Korea referred to the Republic of Korea. In the present research, it specifically represented the city of Seoul.

Presumably, the effect of mother's speech will be largely different from that of Western mother's.

Thus, there is minimal ground to claim that the present discussion of mother's speech of different social classes will be applicable to other cultures, although the general consensus is that the difference of mother's behavior between different races or ethnic groups is less than that between different social groups (Hess, 1970). In order to increase the external validity of our discussions of SES differences in mother's speech, we need to examine the mother's speech of other culture. An ethnographic work will serve the purpose. The present study was propelled by such a need. But at this point, it was not intended to carry a full ethnographic study. Rather, efforts were made to conduct a study to identify similarities or differences in mother's speech between the two groups, Western and Korean mothers. Presumably, no specific information on Korean culture was involved.

Another important goal of the present research was to bring attention to the effects of SES differences in mother's speech on the child's language acquisition per se. Even though a number of studies (e.g., Bernstein, 1961; Hess & Shipman, 1965) have examined SES differences in mother's speech, their findings are more or less irrelevant to the discussion of the child's language development.

Many studies of SES differences in mother's speech have started with Bernstein's thesis of linguistic socialization (Bernstein & Henderson, 1969; Cook-Gumperz, 1973; Henderson, 1973; Hess & Shipman, 1965). These studies considered the mother's speech as an important socialization tool regulating the child's cognitive and social development. They have primarily discussed the mother's speech patterns in relation to the social controls exerted on the child. Middle Class (MC) mother's speech was identified with "person-oriented style", whereas Working Class (WC) mother's was identified with "status/position oriented style". While this distinction has proved useful, more detailed analysis about how these types of social controls determine the mother's actual speech to the child and result in differential impact on the child's language development is not available. Also, as Dittmar (1976) pointed out, these studies were

methodologically handicapped: they relied mainly on interviews with mother and failed to consider the reciprocal communicative reactions between mother and child. Thus, little information is available about the effects of mother's speech on the child's language acquisition through communicative interactions.

With the growing concern about delayed cognitive performances of disadvantaged child's cognitive development, studies of mother's speech have widened in scope and begun to focus on cognitive variables (Bee, Lawrence, Van-Egeren, Streissguth, Nyman, & Reckie; Brophy, 1970; Hess & Shipman, 1965; Olim, Hess, & Shipman, 1967). In particular, since mother's teaching strategies have been considered a good predictor of the child's cognitive behaviour, many studies have attempted to compare the types of teaching strategy of mothers from different social classes. But results drawn from these studies do not shed much light on understanding the effects of mother's speech on the child's linguistic as well as cognitive development. In the first place, recent studies have consistently reported that non-cognitive variables, such as affective or social variables of mother's behaviour are more important for the child development than specific verbal strategies (Schachter, Fosha, Stemp, Brotman, & Ganger, 1976; Wells, 1981). In the second place, since the cognitive variables of mother's speech which have been proposed to be effective were in fact drawn from intellectual task situations, the results are not readily applicable to accounts of language development per se.

There is another group of studies which has focused on linguistic aspects of mother's speech of each social class. These studies have involved a general analysis of different features of discourse occurring in the course of interaction between mother and child (Dunn, Wooding, & Hermann, 1977; Schachter & Strage, 1982; Snow, Arlman-Rupp, Hassing, & Jobse, 1976; Williams & Naremore, 1969; Wootton, 1974). In general, MC mothers were observed to produce more expansion, repetition, and suggestive utterances, whereas WC mothers' speech style was characterized by more use of imperatives. But, since these studies were conducted in the absence of a particular theoretical framework, the speech features were more or less randomly chosen and not exhaustive. So, the results do not provide any general, heuristic value.

In fact, interest in mother's speech has been a recent development. Along with the growing emphasis on the interactive nature of child's development, communicative interaction with mother has been considered one of the most important sources of the child's language growth. Now, "motherese" has gained a wide ground that it is attentively tailored to the child's linguistic competence (Longhurst & Stepanich, 1975) and entirely in the service of the child's language growth (Bereiter & Engelmann, 1966; Brown & Bullugi, 1964; Furrow, Nelson, & Benedict, 1979; Newport, 1977; Phillips, 1973; Snow, 1972; Snow & Ferguson, 1977). Among other variables, mother's social class has been reported as the major influential factor of mother's speech. Nevertheless, since the past studies have not conceived the problem of social class and mother's speech as an instance of linguistic problem of mother's speech on the child's language development, there is little information about what differences underlie the mother's speech of each social class and what consequences these differences bring to the child's language development. The absence of such information makes it virtually impossible to discuss the social class differences in mother's speech in the differential influence on the child's language development. The present study was, thus, directed toward an elucidation of the differential effect of mother's speech from different social groups.

B. Purpose and Outline of the Study

The purpose of the study was twofold. Firstly, it intended to see if claims about mother's speech of different social class which were made in Western societies were applicable to mothers of each social class in Korea. This was a part of the efforts to increase the external validity of our knowledge about SES differences in mother's speech and to present comparative data to Western research findings. Secondly, it attempted to direct attention to the effects of SES differences in mother's speech on the child's language acquisition per se. It was hoped that the effort would advance our understanding of the intricate effect of motherese on the child's language development.

Three major maternal speech systems were selected. The selections were based on the present theoretical propositions which addressed them to be facilitative for the child's language development. The three systems included maternal discourse features, interpersonal functions and conversational turntaking. Samples of mother-child pairs were drawn from Seoul, Korea. Their speech samples were recorded under bookreading and toyplaying situations, and scored according to the three systems. Results were discussed in relation to the SES differences in mother's speech in Korea.

C. Limitations of the Study

The present study was concerned with communicative interaction between mother and child only. Child's interaction with other members of the family was not considered. In Korea, where extended family system still exists, child spends a fairly large amount of time with other members of the family. This kind of linguistic experience may be equally important to the child's language development. Nevertheless, mother's role as a major caretaker remains unchallenged. Thus, mother's speech was taken as a representative linguistic environment of the child and focus was put on the mother's speech only.

One of the consistent findings emerging from studies of mother's speech is that mother's speech is systematically modified in the light of the child's age or linguistic competence. Implicit in these findings is that the effects of mother's speech are not the same at all ages and levels of language development (Gleitman, L., Newport, & Gleitman, H., 1984). Cross (1975) recognized that,

> It is very likely that the patterns of facilitative features will change, throughout development in response to the children's changing linguistic requirement.

But at this point, there is no complete list of maternal speech features which are significant at different developmental stages. Furthermore, the present study did not focus on developmental research in which mother's speech addressed to various age groups of children was examined. Like most of the previous studies, the present study dealt with children from 2 to 3 year old. The discussion of results, therefore, should be limited to the specific stage of development, and

generalization of the implications over the entire course of the child's language development must be cautioned.

The present study was concerned with one global language variable, namely, overall rate of linguistic acquisition. Mother's speech features which would affect the content or courses of the acquisition were ignored. The main reason for this partial inclusion was that relevant data to the present study had reference only to the whole rate of acquisition. Information available in the field of motherese was so insufficient that it was virtually impossible to check one-to-one relationship between a particular feature of mother's speech and its corresponding influence on the child's language development.

The samples of mother's speech collected in the present study were far from representing the entirely naturalistic routines of mother and child. Since the researcher was present on the scene, the mother's spontaneity might have been reduced. Or, the opposite might have occurred; being aware that her behaviour was being observed, a reticient or inactive mother may have spoken with an unusual enthusiasm. Moreover, since the mother's speech was sampled from bookreading and toyplaying situations only, mothers' speech occurring over the entire routine interaction with the child was not included. But within the limited situational conditions, efforts were made to put mother-child pairs at ease and to encourage them to behave as naturally as possible.[2]

One of the main purposes of the present study was to present comparative data to the Western findings about mother's speech. But the present research did not attempt a direct comparative study. In other words, it did not analyze the mother's speech in Korea in comparison with mother's speech in other Western cultures. Rather, mothers described in the literature of Western countries served as the comparison group. Such indirect comparison limited the discussion of Korean mothers' speech style in comparison with Western mothers.

Also, the subjects were drawn only from Seoul area. Presumably, generalization of the mother's speech features that emerged from the present study to the whole population of

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[2]The methodological strategies involved are discussed in Part IV.

Korean mothers must be taken with caution.

II. THEORETICAL BACKGROUND OF THE STUDY

A. Review of Theories of Child Language Development

Studies of child's language began with the structuralism in linguistic theory. Following the works of Bloomfield (1933) and Sapir (1921), researchers have attempted to discover the inventory of linguistic items and to describe the ways in which these linguistic elements are distributed or combined in relation with one another. Language development was seen as a gradual but uniform process of getting the appropriate items into the linguistic repertoire of approximating the adult linguistic style.

In the 1960's, Chomsky (1965) discouraged the interest in a system of linguistic elements. He asserted that language development should involve more than an accretion of linguistic items. He proposed that we direct attention to an underlying rule system which generated all the infinite number of grammatical sentences. He made a distinction between the surface structure of a sentence and underlying structure. For instance, he pointed out that the two sentences, 'The man threw the ball' and 'The ball was thrown by the man', had a close relationship between them. According to him, these sentences were just transformed into different types from the same underlying basis by a certain rule system. Thus, in order to understand the infinite number of sentences, he asserted, it is necessary to establish a rule system accounting for all the sentences.

His theory runs roughly like this. Child is endowed with linguistic structures, which he named "linguistic universal". These represent an innate linguistic competence that all human language has in common. Various linguistic universals constitute the internal structure of Language Acquisition Device (LAD). When child is exposed to a natural language, the LAD receives linguistic data. And it successively tests and confirms the linguistic input according to the pre-existing universal hierarchy of categories. In other words, it judges relative grammaticality of linguistic input. And then the grammatical rule of the linguistic input is presented in a certain form. It is the grammatical competence which enables the individual to

generate an infinite number of sentences without learning each sentence.

A main concept that underlies his theory of language is concerned with the innate linguistic competence called LAD. What makes language acquisition possible, according to him, is the child's innate linguistic disposition. But researchers trained in cognitive psychology (e.g., Sinclair-de-Zwart, 1973; Slobin, 1973) have largely shown discontentment over Chomsky's argument that innate linguistic structures rule over the entire language acquisition process. They agree to the point that language development is neither a taxonomy of linguistic elements nor an assemblage of individual linguistic experience. They share the point that language acquisition must be based on highly "structured schemata" rather than on merely speech samples of a limited and degenerate quality. In other words, both perspectives recognize the necessity of the "creative aspect" of language. In Chomskian theory, however, the innate linguistic structure is proposed to deal with the structural schemata. On the other hand, in Piagetian psycholinguistics, the child's cognitive development within the frame of the symbol function is hypothesized to provide the child with the necessary structural schemata. In cognitive theory of langugage, child's verbal production is assumed to be a particular form of symbolic behavior. Sinclair-de-Zwart (1969) noted,

> His first verbal productions recognizable as "words" are far from being signs in the sense of belonging to a fully structured system. They resemble far more symbols, which can be loosely associated but are essentially isolated representations of schemes. They share the characteristic of symbols in that they are inextricably entwined in the complex of objects, actions the subject can perform an objects, and symbolic representation of the objects.(p.331)

Like any other symbolic functions, such as drawing, or symbolic play, which develops concomittantly with the child's first verbal production, child's language development is assumed to develop from sensorimotor intelligence and to serve to express the internalized representations of external world. Thus, for a child to learn a language, he[3] must accrue many cognitive notions, namely, internalized representations, which will be matched with appropriate linguistic forms.

---

[3] The pronoun "He/he" was used to represnt child in general; It did not specifically refer to male child only.

In the 1970's, the cognitive viewpoint has been established as the "cognitive determinism" that there must be a cognitive precursor to the language development. This view has accumulated much evidence. Sinclair-de-Zwart (1969) again quoted,

> ..examples abound in all recordings of child language; to quote two of Piaget's examples;(1946, p.231) J. around 1;6 knows better and better how to take advantage of adults to get what she wants; her grandfather is especially docile in this respect. The term *panana* ("grandpere") is used not only to indicate her grandfather, but also to express , even in his absence, her desires; she points to what she wished to have and adds *panana*. She even says *panana* to express a wish to be amused when she is bored. (p. 331)

Here, the word *panana* has a symbolic function. It is fused in form and meaning. J. used the word to designate a pattern, configuration, or some content to which the word could be taken to refer (Werner & Kaplan, 1963). The word served to express the child's internalized representation of the grandfather.

Furthermore, there has been ample empirical evidence that what is expressed in linguistic form is basically what the child already knows about the world. Sinclair-de-Zwart (1969), for example, conducted a group of experiments, bearing on the relationship between linguistic expression and the child's cognitive functions. The subjects were divided into three groups according to their results on the Piagetian conservation task and asked to describe simple situations. Their use of certain expressions was explored. It was observed that the conservation children used comparatives for the description of different quantities, whereas the non-conservation children just used absolute terms. Later, the researchers attempted to teach the latter groups of children the expressions used by the former group; few of them in the non-conservation group were successful in learning the expressions. From these findings, they drew a conclusion that language development was largely dependent on what the children knew of the world. It was assumed that the child's first verbal production was a symbolic expression of what the child already knew.

More compelling evidence is drawn when one attempts a chronological comparison of general linguistic developments with general developmental stages in cognition. In such an attempt, Ingram (1978) found a close linkage between cognitive function and its corresponding

linguistic development. Meaningful speech development coincided with Piaget's substage 6 of sensorimotor period. General findings were as follows: Period I in language development, in which words were primarily used to express the child's needs and emotions, covered substages 4 and 5 of Piaget's cognitive development, in which a primitive form of representative capacity began to emerge. Period II in language development, in which language was used for expressing a referred symbolic meaning, coincided with substage 6, during which internal representation greatly evolved. Implicit in this observation is that the child's representative capacity is a necessary cognitive precursor to language development.

Studies which have examined linguistic development from both a formal and functional point of view also present equally compelling evidence. A far reaching principle has been drawn from these studies (Cromer, 1968; Werner et al., 1963): New forms first express old functions and new functions are first expressed by old forms. In a recent study done by Kuczaj (1982), this principle was clearly confirmed. The spontaneous speech of fifteen children was sampled and the linguistic forms which were used to express various meaning categories were examined over six consecutive weeks. He found that the children used a form to express an old meaning, another form then came to be used to express its meaning, and then another form was added to those which were used to express the same meaning. For example, the children's use of future tense developed as follows: They first used *gonna*, and then *will*, *would*, and *won't*. Some replacement of forms also occurred when the form was not appropriate to express a meaning. Data were also obtained to suggest a limited number of forms used to express limited number of functions; as the number of functions increased, so did the number of forms to express these functions. The theoretical and empirical evidence suggests that, at least for the toddlers, what is expressed in linguistic form is largely determined by what they know about the world.

But recently, there has been a new movement toward the reorganization of Piaget's thesis of cognition and langugage acquisition. In the Piagetian approach, language development is interpreted as a cognitive process which enables the child to understand the context of a potentially communicative interaction. Cognitive precursors are assumed to provide cognitive

processes in which cognitive entities (internal representations), which will be expressed in linguistic forms, are accrued. But theorists have speculated that the child must not only achieve the cognitive maturity necessary for conceiving the notion but he must also be able to interpret the adults' linguistic expressions (Schlesinger, 1982). The emphasis on the functional aspect of cognitive precursors represents the neo-Piagetian cognitive determinism. In the neo-Piagetian approach to cognition and language, focus is placed on the functional aspect of cognitive precursors. It is assumed that the infant's cognitive structures allow him to understand the referential relationship between linguistic form and its corresponding referent (Moore & Meltzoff, 1978). According to this view point, what is important in the course of language acquisition is to develop a conception of language as a communicative system. In other words, the child must be able to determine the systematic correspondence between words and their corresponding referents.

While theorists acknowledge the importance of cognitive development in language learning, for the past several years, focus has shifted to the social domain of language learning. With the growing concern with interactive nature of child language development, the dialogic context or the child's linguistic experience with adult has emerged as a significant source of child's language acquistion. For example, some theorists (e.g., Bateson, 1975; Kaye, 1976) have been concerned with social precursors of the child's communicative skill. It is hypothesized that the child's early phase of mutual, interactional framework with caretaker lends itself to the start of the child's social dialogue. Likewise, the child's joint action with adult in which the child establishes mutual topics with the adult and makes comments on them is regarded as the precursor to the structure of language use (Bruner, 1975). Also, researchers have adopted theory of interpersonal communication and attempted to trace the development of intention in the child's communicative behaviours (Halliday, 1975). On the other hand, theorists have put emphasis on the effect of linguistic input on the child's language acquisition. Especially, the adult's linguistic input to a child, which is often termed motherese, has emerged as a vital source of language development and efforts have been made to determine the

facilitative features of linguistic input which may be positively correlated with the child's language acquistion (Snow & Ferguson, 1977). In sum, focus has shifted from innate linguistic or cognitive structures to a dialogic context or to the integration of social and cognitive processes.

Although such transition is a recent development in the area, half a century ago, Vygotsky (1981) already recognized the sociogenetic nature of language development. Vygotsky noted that high level of human mental operation was fundamentally derived from the process of social interaction. Any kind of human function was assumed to first appear on interpersonal level and then on the individual's intrapersonal level. Thus, according to him, child's development is a internalization process in which the child internalizes all his social experiences. Child's language acquisition is hypothesized to go through the following process. In the beginning, the child acquires and understands the world at indexical level; words just have referring functions. Words are, at this stage, basically associated with the concrete perceptual features of their referent. But through social interaction with an adult, the child learns to categorize the words according to their social semantic relation. Through learning the generalized meaning of words, the child becomes capable of communicating with the other members of the society. Presumably, the child's social interaction is considered as the very source of the child's language development.

In fact, some of the aspects of language acquisition that cognitive determinism claims to explain can also be understood in terms of child's social context. In cognitive determinism, particularly in neo-Piagetian thesis of cognition and language, it is argued that the child's cognitive development provides the child with cognitive functions with which the child understands and interprets his linguistic environment. But a close examination of the child's social interaction with his mother or caretaker shows that the interaction is constructed in such a way that it helps the child interpret what goes on around him. Bruner (1975) felt that the adult's utterances which were closely related to what the child drew his attention facilitated the child's understanding of the linguistic environment. Furthermore, the child's social interaction

also gives solution to the problem of categorization process (Schlesinger, 1982). Piagetian cognitive determinism explains that the child is cognitively able to understand the context in which the linguistic communication occurs. But as Schlesinger (1982) pointed out, such understanding of communicative context does not necessarily imply that the child is also able to categorize the state or events which occur in the context. Rather, such categorization process can be achieved through the child's social interaction in which the child himself experiences each of the concepts and its underlying meaning. Presumably, cognitive development is effective only to the extent that it interacts with the child's social experience.

Given the fact that the child's language development still verges on mystery, however, any generalization that language can be explained or at least interpreted by either cognitive or linguistic input model must be taken with caution. Furthermore, any delineation of relationship between cognition or environment and language development is still bound to be speculative in nature. Thus, at this point, it will suffice to hypothesize that in order for a child to learn language, there must be cognitive prerequisites which enable him to construct representations of the external world which will be expressed in linguistic form, and to extract referential relationship between words and their referents, and environmental or social interactional assistance which will facilitate the required cognitive development and its exercise of power on the child's language development. Adopting the intergrated position, in the following chapter, there will be a discussion on how the cognitive function can be interrelated with the child's interactional experience with a caretaker.

B. Cognitive Development and Interactional Variables

The present study refuted neither the notion of cognitive determinism nor the interactional model. Rather, it attempted an integrated approach: For a child to learn a language, he has to acquire a certain degree of cognitive concepts and ability, and is also required to be engaged in a communicative interaction with an adult which would facilitate the development of the necessary cognitive concepts or the relevant cognitive processes which are

assumed to be important to the child's language development. In the following section, the integration of the two perspectives will be discussed in relation to the child's language development.

Piagetian Approach and Interactional Variables

According to Piaget's thesis of cognition and language, child should satisfy three cognitive requirements to acquire language. Firstly, he must be able to represent objects and events in his perceptual absence. That is, he must acquire internalized representations of the external world. Secondly, the capacity of object permanence, the concept of the continued existence of absent objects is required in order to represent objects and events which are not perceptually present. Thirdly, before the child is able to perceive the existence of objects and events as independent of his own behaviour, that is, to discriminate between external objects and actions that are performed on those objects, the capacity for understanding the continued existence of objects or events which are out of sight is impossible. Thus, the decentration of self must be accomplished before he can understand and produce socially meaningful speech.

In support of Piaget's argument, many theorists (e.g., Halliday, 1975; Ingram, 1978) observed that child's language developed in accompaniment with these cognitive development. Let's clarify this linkage between the child's cognitive development during the child's sensorimotor period and the concurrent language development in more detail.

During the substage 1 (0;0-0;1), infant's behaviour consists almost entirely of innate action patterns. Among these are hearing, sucking, grasping, visual accommodation, eye movements, and vocalization (Brainerd, 1978). These innate reflexes, through large numbers of repetition, stabilize and form a basis of subsequent substages. In the second substage (0;1-0;4), these stabilized reflexes emerge in the form of "primary circular reactions". These reactions are the primitive form of learning experience. The infant, through the experience of repetitive sensorimotor behaviour, learns the effects of the actions and utilizes them to meet a certain purpose. For example, when the infant feels hungry, he makes sucking like movement, opens

and closes his mouth, and moves his tongue constantly (Piaget, 1952). Piaget notes that the infant is now able to behave with a minimum intentionality. But at this level, intention of a certain behaviour is still based on sensorimotor schemes and carried in a very primitive form. In the first place, the behaviours are just directed to the infant himself; they are not used to achieve an aim of which source is outside of himself. In the second place, there is no real sense of differentiation of means and ends. He is not able to set up ends from the outset and to search for a proper means.

During the substage 1 and 2, infant largely shows lack of differentiation between the self and the physical and human environment. Self remains undifferentiated, and thus unconscious of itself, and affectivity is centered on the infant's own body (Piaget & Inhelder, 1969). The infant lacks differentiation between external world, which is composed of objects independent of the subject, and an internal or subjective world (Piaget, 1970). He does not know what belongs to the world and what belongs to himself. Thus, even when he performs a certain action, and produces a subsequent result, he does not understand the causal relationship existing between the two events. The infant lacks differentiation between subjective causality and objective causality. Through continuous experience with the world, he acquires progressively the concept of objectivity. This concept of objectivity, however, does not appear by the end of substage 2.

When infant reaches substage 3 (0;5-0;8), he begins to show more advanced intentional behaviours. When the objects he manipulates cause an interesting effect, he repeats the gesture a number of time to get the same effect. That infant shows behaviour which is repeated as a function of external reinforcement suggests that his behaviours are preceded by a certain type of intention. What implies by the arrival of such intentional behaviour is that he has acquired a primitive form of functional differentiation of means and ends. This in turn means that the infant is now on the progress of breaking the initial adualistic ego state, for the differentiation of means and ends is virtually impossible to occur unless the infant decentrates himself and perceives objects and events as distinct from himself. Around this time, infant shows first sign

of object permanence. When an interesting object is taken away, the infant makes an effort to recover it. But this recovering effort is shown only when the object is moving in direction of the hiding place at the time of hiding. In other words, the infant is not able to represent the object internally. The internalized representation is yet to be developed.

As Piaget predicted, no substantial verbal production is observed until the substage 3. Infant produces spontaneous vocalization. But a socially meaningful word or speech is yet to be developed. During this period of time, however, the infant establishes some of the precursors of reference and communicative skills. For example, through his daily interaction with caretaker infant develops basic patterns of conversational skills. Bates, Camaoni, and Voterra (1975) felt that mother's constant interpretation of the infant's behaviour exposed the infant to a basic pattern of mutual exchange of communication and helped the infant to recognize himself as a communication partner being addressed. It is assumed that, through this experience, the infant comes to understand when a response is required of him and when it is not. Besides learning the conversational skills, the infant also learns to interpret the environment through the mother's comments on the contexts or objects. Such interaction with mother enables the infant to have a good idea of what the adult's sentences are about. In order words, he learns to categorize the concepts which will be expressed in appropriate linguistic forms. But a more advanced level of linguistic production does not appear until the child has achieved the internalization process.

When the infant reaches substage 4 (0;9-0;11), he shows more advanced object permanence concept. At this time, the infant sets out to obtain a certain result; he shows attempts to obtain objects which are out of reach or have just disappeared, even though they are not moving in the direction of the hiding place at the time the object is hidden. But the means employed are derived from known schemes of assimilation; the means are those which are obviously seen from the outset. Thus, when an object is hidden under a single book, the infant will find the object. But when the book is moved under a pillow, he can not find the book. Thus, the infant's behaviour at this stage is not a real sense of searching behaviour for

an object per se, but a mere repetition of previous instrumental behaviour. But that the infant shows an effort to find object of which hiding procedure is unseen represents a first evidence of internalized conception of object. At the same time, the infant of substage 4 is able to behave with a scheme of observed event. For instance, before this stage, imitative behaviours are limited to those that the infant can see himself perform (e.g., hand movement or leg movement). But at substage 4, infant imitates a model's facial expression of which imitation he can see. In sum, the infant shows the first signs of representational formation of objects and events.

During substage 5, the infant makes further progresses in internalized concept of external objects. Now the infant is able to find objects which have been seen hidden in successive places. But the object concept is not still completed; the infant looks for an object where he has seen it hidden. Although he is able to represent an object in internal image, this representation disappears once the actual objects are not visible any more; the infant is not capable of conceiving of objects or events in dissociation with their actual presences. Nevertheless, the appearance of comparatively advanced object concept sufficiently implies that the infant has made progress over substage 4 and become close to the acquisition of internal mental representation. Furthermore, the arrival of such object concepts is an obvious evidence of the infant's ability to distinguish himself from the external world.

Concomitant with this cognitive development, around 9 or 10 months, child starts to produce single-word utterance. This single-word period continues until 1;4 months. During this period of time, child mainly talks about the objects available around him such as animals, food, and toys (Nelson, 1973). As the vocabulary increases, some words for food, body parts (e.g., eye, ear,..etc.), clothing (e.g., hat, shoe), animals, household items, vehicles (e.g., car, boat, truck), and people (e.g., mama, dad) are frequently used. Basically, these words are used to request or to command (Ingram, 1978), or to express needs (Piaget, 1962). They also serve the functions of satisfying the child's needs, controlling the behaviours of others, interacting with people, expressing feelings and exploring the environment (Halliday, 1975). At this stage,

words are not employed as a means of communication in the sense that the child delivers information to someone who does not already possess the information. The word is just an expression of what the child has internalized. As far as the child is concerned, he is very clear with his linguistic system. But the notion that the child intends to express through a word is not necessarily the same with what an adult perceives in the word. This is why some time adult has difficulty interpreting the child's utterances. Halliday refers this characteristics of the child's single-word utterances to the lack of informative function of language. The reason that the child's single words are less informative is that child's one-word utterances refer to particular roles or configuration of the words, not just to the objects themselves (Greenfield & Smith, 1976). Child says "door" when he wants the door to be opened or closed. He says "papa" when someone opens the door. The form and meaning of the word are fused. The words are used to designate a conceptual pattern that the words are taken to refer to. Thus, these words are, as Piaget asserted, basically symbolic in nature. The fusion of form and meaning continues to appear until the the end of the substage 5. When the child reaches substage 6 and enriches his internalization process, he comes able to use words in a more sophisticated manner.

Returning to the cognitive development, before substage 6 (1;4-2;0), the child's representation capacity is limited to physical world only; he needs actual physical model of the object in order to represent it. But at substage 6, the child is capable of perceiving objects or events in their absence. He has acquired representations of objects and events. This capacity provides him with the process by which "thought" itself becomes possible. The child starts knowing things (Kagan, 1984). In Piagetian terms, such cognitive advance implies that the child has now accomplished the decentration process of self from external world, although this differentiation ability continues to grow throughout the following preoperational stage.

During this period, child uses single words in semantic roles such as Agent, Object. And a few months later, two-, or multi-word sentences start to appear. Two-word utterances are often proceded by a brief period in which child produces strings of single words in succession (Clark & Clark, 1977). The words in the string are those which could be combined in two-word

utterances. By producing those two-word utterances, the child is able to produce more than one role or action at a time. Consequently, the meaning of a word becomes more restricted and precise. With this advance in linguistic ability, child comes to be able to involve in a dialogue (Halliday, 1975), which implies that the child is now able to fulfill a communicative role in a conversation.

The concomitant occurrence of meaningful speech with the child's internalization process led Piaget to draw the following points.

1. Language is a particular form of symbolic behaviour; it depends on the acquisition of internal representations; it functions to express what the child already knows about the world.
2. Cognitive development provides the child with processes by which he accrues various schemes of objects and events which will be subsequently expressed in linguistic forms.
3. Internal representations, permanent object concepts, and decentration of self are the cognitive precursors to the child's language development.

Seemingly, language development, according to Piaget, is largely dependent on the child's cognitive development, particularly symbolic formation, which Piaget claims develops through the sensorimotor periods. But other theorists pinpoint that even the symbolic formation is to a large extent influenced by the child's social interaction with his caretaker. Mead (1934) noted that a gesture on the part of one organism in any given social act called out a response on the part of another organism which was directly related to the action of the first organism and its outcome(p.77-79). As seen by Mead, while child responds to the incipient act in the same manner that others do when requested, these gestures are functioning as symbols to the child. Through such reciprocal interaction with adult, child constructs symbolic concepts of his behaviour. Vygotsky recognized the symbolic formation process as the reconstruction of interpersonal functions into intrapersonal functions (Wertsch, 1983). He viewed that throughout the child's interpersonal interaction with others, the child accrued the symbolic meanings of act and speech, and these socially-based information was internalized and

consequently governed his thought and behaviour.

In the present research, the two perspectives, namely, cognitive determinism and interactional model are not seen incompatible. Rather, they are understood in an intergrated manner that for a child to learn language, he should be able to understand the context of a potentially communicative interaction and this cognitive development itself can be influenced by the child's social interaction. Interactional context with mother is assumed to facilitate the child's cognitive development which is claimed to be necessary for language development.

For example, a recent study done by Schachter et al. (1976) has demonstrated the facilitative role of the mother's speech on the child's ego development. It has shown that a caretaker's speech can assist the child's language development in such a manner that goes parallel with Piaget's thesis of cognition and language. The study showed that caretaker's speech did exert influence on the child's ego development. The investigation was a developmental study in which the interpersonal functions of caretakers' speech to children of 3;0-5;0 were examined. It was observed that as the children developed from the primary adualistic state of self-differentiation to ego differentiation and individuation, the caretakers' speech systematically reflected these developmental changes.

Before age three, children's speech was mainly composed of desire implementing, reporting about the self. Functionally, the speech at this stage was socially independent. When the children were in the pre-differentiation state, caretakers' speech functioned to speak on behalf of the children, articulating their desires, verbalizing reports about themselves. Caretakers' speech served the role of the ego that the children did not yet possess. Schachter, Kirshner, Klips Fredricks, and Sunder (1974) called this state of caretakers' speech "alter-ego" speech. Caretakers spoke on behalf of the children's undifferentiated ego; they also made reports on the children themselves as well as on the environment. After age three, children's speech began to reflect the differentiation of self; ego-enhancing and boasting speech showed abrupt increase. Concomitantly, caretakers switched to an "ego-supportive speech", in which they affirmed the children's boasts, and provided justification of their ego blows. Finally, as

the children moved into socializing environment, they began to be aware of the needs of the listener; their speech became a more or less socialized speech. Caretakers' speech of this period also moved to "ego-socializing speech", which mainly served to verbally articulate norms.

Implicit in these findings is that mother's speech may also largely function to foster the child's ego development at interpersonal level. This implication is significant when one remembers that the child's ego differentiation lays the basis for the development of internal representation, which, Piaget asserted, constitutes the main source of language development. Presumably, an argument can be made that mother's responsive and spontaneous speech which is finely tuned to the child's ego state would support the child's language development.

Neo-Piagetian Approach and Interactional Variables

Although, as argued by Piaget, the cognitive constructs that the child has accured throughout sensorimotor period are a necessary base for the acquisition of language, they are not a sufficient one. When one accepts Piaget's cognitive hypothesis, a question is necessarily raised: How then does the child discover proper linguistic form for intended meaning. The essence of the question lies in how child matches a representation of objects or events with their proper form of speech. It has been hypothesized that the child learns proper forms of speech through shared activities with an adult in which the adult gives linguistic expression to those meanings which the child is already capable of intending and understanding (Howe, 1983; Strohoner & Weingarten, 1982; Wells, 1974, 1975b). In that case, the child's task is just to discover, over a number of similar situation, how the patterns of linguistic form that he is able to distinguish in the differences that addressed to him are related to the situational meanings.

The concept of shared activity has been in fact endorsed by sociogenesis theorists (e.g., Halliday, 1975; Hymes, 1974). They feel that the communicative context in which the child is engaged with an adult and provided with a great deal of useful surface information for the production of meaningful speech serves a basic source of language development. They argue that such factors as shared intentions and nonlinguistic contextual clues ease the problem of

decoding message and facilitate language acquisition. A number of studies have been generated to investigate the effective and facilitative features of such linguistic context. On the other hand, the child's cognitive factors which interact with such environmental variables have received little attention. Neo-Piagetian approach has attempted to take up this defect of the current research of the field. It has made efforts to demonstrate that such contextual information can be effective and useful to the extent that the child is cognitively able to process and utilize information. The approach has expanded Piaget's cognitive hypothesis by elucidating the cognitive processes through which what the child acquires about the world is matched with appropriate linguistic form, which were gone unnoticed in Piaget's original thesis of cognition and language.

Neo-Piagetian approach tends to support the notion of shared activity by demonstrating that the child is cognitively capable of understanding the adult's use of words and determining correspondence between words and their referents. It starts with the assumption that in order to acquire language, the child must develop a concept of language as a communicative system. In other words, the child is required to learn how the speaker's utterances are related to his intending meaning. Moore and Meltzoff (1978) suggested that before the child produced any meaningful speech, he develop cognitive functions which enabled him to understand a referential relationship between words and their meanings. As a relevant cognitive function to such understnading of referential relation, they pinpointed the development of "object identity concept". They postulated that in order for the child to understand such a referential relationship between words and their meanings, the child needed to understand that an object remained the same with itself throughout transformations such as moving from place to place or disappearing and reappearing; that an object is the same with itself, its unique identity, not to its featural similarity to another object (Moore & Meltzoff, 1978). Their argument goes even further to suggest Piaget's concept of object permanence be also preceded by this object identity concept. They asserted that,

> If disappearance annihilates the object for the infant, when that object reappears there is no reason why it must be viewed by the infant as the same object. It could

> just as well as be a different object that has now appeared in the same place that the first object disappeared. It would thus seem that before an infant can utilize the disappearance and reappearances of objects as data bearing on their permanence, he must see the pre- and post-disappearance object as the same obejct. (Moore & Meltzoff, 1978; p.163)

If their stance is correct, there is sufficient reason to believe that the child develops relevant cognitive functions which will provide a cognitive base for his understanding of referential relationship between words and corresponding referents.

Such argument is supported by recent studies of visual tracking in young infants. In a study done by Moore, Borton, & Darby (1978), it was demonstrated that even before the infant developed concept of object permanence, he showed signs of acquisition of object identity. The authors constructed three types of anticipatory visual tracking situations: permanent task, feature task, and trajectory task. Each task involved violation and non-violation phases. In permanence-violation situation, the object did not appear on the proper trajectory between the screens before emerging from behind the second screen. In permanence-non-violation situation, it did appear. In trajectory-violation situation, the object reappeared from behind a single screen much faster than when it disappeared, whereas in trajectory-non-violation situation, it maintained the initial speed. In the feature-violation situation, the object "disappeared" was different in feature from that "appeared", whereas in feature-non-violation situation, the object disappeared was featurally identical with what reappeared. Visual disruptions in the pursuit of the object were recorded. In general, followings were observed: The infants of 5 months showed disruptions in feature and trajectory tasks when they were violated, but not in permanence tasks. On the other hand, the infants of 9 months showed disruption in all the three task conditions when they were violated. From these results, the authors concluded that as predicted by Piaget's theory, before 9 months, the infants did not develop object permanence concept. But the fact that the infants of 5 months showed disruptions to feature and trajectory violation conditions implied that at least even at this age, they began to show ability to perceive an object as the same with itself throughout various transformations. Thus, when the object was not the same in featural or spatiotemporal aspects,

the infants showed signs of detection of these difference --i.e., disruption of visual tracking.

In applying the object identity concept to the infant's acquisition of language, Moore and Meltzoff (1978) hypothesized that the infant first applied the basic cognitive process to transformations of physical world to extract invariant objects and then to the communicative encounter to extract invariant relationships between adult's word and these transformational events. According to them, the infant's understanding of adult linguistic behaviour undergoes the following procedures.

1. In the first phase, the infant does not recognize any systematic relation between adult's words and transformal events: the infant is just about to respond either to the adult behaviour or to the words, not to both of them simultaneously.
2. Once the infant's understanding of transformations overlaps the adult's words, the infant notices a systematic temporal relationship between the words and the transformational objects or events. The infant imitates this purely temporal relationship between the words and transformational events.
3. The infant begins to attend to the sound sequence of the adult words and their relation to transformational objects or events.
4. Finally, the infant notices a co-variance between the adult's sound sequence and a particular object.

In sum, the neo-Piagetian hypothesis about relationship between the infant's cognitive development and language acquisition can be summarized as follows:

1. As the infant develops schemes of object identity, he conceives of objects as invariant throughout transformational phases.
2. This object identity forms a cognitive basis for the infant to extract invariant relationship between words and their meanings over different transformations.
3. The function of cognitive development is to enable the child to recognize and understand such relationship between words and their referents and to utilize it in producing an idiosyncratic speech.

Although, as argued in neo-Piagetian approach, child's matching process requires a certain degree of cognitive function, many theorists have observed that the child's joint interaction with adult assists and eases the mapping process. For example, Ratner and Bruner (1978), and Brown (1976) have showed concern with the highly confined semantic domain of shared activity. Their argument runs like this. In a shared activity, linguistic topics are primarily selected by the child and centered on the child's ongoing activity. Adult's comments on the objects or events on which the child is directing his attention are likely to provide high fidelity of relational information. Such informational input is likely to ease the matching process of linguistic form with its corresponding referent and to promote associability of reference to abstract linguistic structures (Brown, 1976).

Halliday is one of the theorists who directs attention to the notion of mutually shared information. He (1975) proposed the concept of text as the fundamental function of language. Text was defined as a situation about which information arising from situational context in which receiver and sender were present was formulated linguistically. According to his view, the text to which linguistic reference is made is always systematically related to the situation context, which largely determines the content or organization of the text. Thus, in order to envisage the process in which the child discovers appropriate linguistic forms for various object and events, and extracts invariant rules governing the forms, he asserted, it is required to examine mutual relation between adult speech to the child and child speech to the adult within the context of independent activity.

On the basis of Halliday's notion of text, Shugar (1978) attempted a text analysis, in which text constructed by two partners, adult and child, was examined. The analysis revealed a closely knit pattern of dialogue unit between mother and child; the two partners were engaged in a complete matching reference situaion. When one of the partners started off by referring to some situation, the other partner took the partner's preceding utterance and continued to deal with the same reference situation. It was mainly the child who made shift to a different reference situation, whereas mother played the role of identifying and recognizing the topic that

the child brought into conversation. As predicted by many threorists, the reference situations to which the child shifted were those which were easily accessible as sources of new information; they were largely confined to the child's perceptual field. The primary function of the adult's utterances was to correct the match between the child's text and appropriate linguistic form for the reference situation.

An implication of this theoretical and empirical support is that an effective linguistic input requires high informational properties which ease the mapping problem of representational knowledge into appropriate linguistic forms. Newport, Gleitman, H., and Gleitman, L. (1977) proposed two hypotheses supporting the requirement of informational properties of linguistic input. The first is "processing bias hypothesis". The main idea of the hypothesis is that the child has his own way of biasing linguistic input. Linguistic input which can be fitted into his cognitive/attentional capacity is selectively attended to and other input which is beyond his conceptual capacity slips out. Newport et al. (1977) noted that,

> The child may listen primarily to high-pitched speech, to speech accompanied by pointing, eye-contact and other gestures, to speech which begins by calling his name and to speech which contains some familiar words. That is, he may attend selectively when he has reason to suppose that he is being addressed, and such speech may have special properties good for language learning.(p.11)

This is not surprising when one remembers the main thrust of the cognitive hypothesis that the child begins his linguistic learning with a pre-organized cognitive structure and this structure largely confines what is expressed in linguistic form. It is borned out that the child's pre-existing cognitive structure circumscribes the types of linguistic input and selectively processes the linguistic input. The second hypothesis involves "referent-matching strategy". According to the referent-matching strategy hypothesis, the child acquires concept of syntactic expressions most rapidly when he is placed in salient positions in surface structures or provided exemplars at the moment that his attention is drawn to the referents (Newport et al., 1977).

These theoretical accounts imply that mother's speech which includes 1) fine semantic adjustment to the child's cognitive and linguistic levels, and 2) salient informational clues to referring meaning would facilitate the child's language development by easing the matching

process of words and linguistic forms.

III. LITERATURE REVIEW

A. Facilitative Features of Mother's Speech

Interpersonal Functions of Mother's Speech

While there are abundant studies of mother's speech in the context of linguistic interaction with the child, few attempts have been made to examine the mother's speech with respect to its interpersonal functions. Most research has focused on the more or less linguistic aspect of mother's speech, whereas the motivational, personal, and social aspects have gone unnoticed. Schachter et al., (1974) recognized the lack of attention to the interpersonal functions of mother's speech as well as of the child's spontaneous speech, and conducted a series of studies to meet the need. They pointed out the lack of an instrument for characterizing the child's spontaneous interpersonal speech and attempted to construct a scoring system which would comprehensively cover all the child's spontaneous utterances. On the basis of a vast amount of data recording the children's spontaneous speech occurring during free play activities, they proposed nine major categories of spontaneous speech: Expressive, Desire Implementing, Possession Rights Implementing, Ego-Enhancing, Self-Referring-including, Jointing, Collaborative, Learning Implementing, and Reporting.

On the basis of the identified categories, they attempted to identify developmental changes in the patterns of spontaneous speech usage from ages 2 to 5. On the basis of Piaget's account of child's ego-differentiation process, they hypothesized that the child's speech would reflect the adualistic state, gradual self-differentiation, and the social-dependent state in sequence. As predicted, spontaneous speech of children before 3;0 comprised mainly of Expressive statement and Desire implementing statements. Following the intermediate stage during which Possession and Right Implementing speech appeared, at the age of 3;0 or later, the children began to show large proportion of Ego-Enhancing statements. In the domain of social motives, a similar ego-mirroring speech was observed. Before 3;6, the children's speech

comprised of the Self-Referring statement, which required least differentiation of self from others. As the children grew old and reached the age of 3;5, they began to show Collaborative statement, which required the high level of differentiation ability. The results led to a conclusion that the child's spontaneous speech largely reflected the developmental continuum of his ego state.

Based on the scoring system developed for the child's spontaneous speech, the authors identified six major responsive speech categories for caretaker's speech--respond to Ch (child) Expressive, Desire Implementing, Ego-Enhancing, Collaborative, Learning Implementing, Reporting communication--and five spontaneous speech categories--Restrict-command, Activate, Reports on Ch, Provide knowledge or Teach, Report on self, other, thing. Caretakers' speech to children from 2;0 to 5;0 was examined. Caretakers' speech was largely geared to the children's ego state and boosted their ego-differentiation. Before 3;0, when the children's speech comprised of Desire Implementing and Self-Referring-Including statements, the caretakers' speech mainly functioned to explicate the children's desire and to make reports on the children's behaviour. Caretakers spoke on behalf of the children's ego which the children did not yet possess. After 3;0, when the children showed greater proportion of Ego-Enhancing statements, the caretakers' speech switched to ego-boosting speech and facilitated the children's burgeoning ego development. When the children's speech became socially dependent speech, the caretakers reflected this transition and produced more socially based speech, such as explanation or justification of the children's bahaviour according to social norm. In particular, caretakers' speech to the children of 2;0 was characterized by alter-ego speech. It mirrored the speech of the children themselves, amplifying the children's own impact, and affirming their role as the active explorer. In general, it served the role of the ego that the children did not possess.

The researchers applied their analysis of interpersonal function of caretaker's speech to different social groups (Schachter, Marquis, Bundy, & McNair, 1977). They noted that SES differences of mother's speech lay in the speech act, interpersonal functions of speech rather

than in syntax or semantic. Responsive and spontaneous speech of mothers of three social groups--Black advantaged, Black disadvantaged, and White advantaged--were examined with regard to the various subcategories of Functions of Interpersonal Speech of Caretaker (FIS-C). Significant social class differences were found in three subcategories of responsive speech. The advantaged mothers, regardless of their ethnic background, were more likely to respond to the children's Desire, Ego-Enhancing statement and Report. In contrast, the disadvantaged mothers were more likely to produce restrictions or commands. In concluding the results, the authors suggested that advantaged mother's speech style was more likely to facilitate the child's language and cognitive development by fostering the ego-differentiation process.

In sum, mother's speech which is finely geared to the child's ego state would assist the child's language development by facilitating the child's ego differentiation process.

Informational Aspects of Mother's Speech

A number of studies have demonstrated that mother's speech which accompanies informational clues to the meanings that the child is learning assists the child's language development. Evidence has been drawn from three sources of information. The first source is related to the analysis of shared activity such as the child's play or book reading. The second source is drawn from studies of the effects of concrete referents on language acquisition. The last source of evidence is found in investigations of the effects of recast-type of communication. Let's first consider the effects of shared activities.

Shared Activities

Many theorists have considered the child's play situation as an optimal environment for language learning. Child's play situation is characterized by 1)largely restricted semantic domain and 2)a task structure which can be easily predicted. These environmental conditions are thought to permit child to learn a specific form of speech of which meaning he fully understands. In a study done by Ratner and Bruner (1978), it was observed that specific words

learned and understood in a play situation were utilized in actual life routine of which situational context resembled the play situation. Richard, one of the subjects, for example, learned to say "Hello, house", when he saw pieces from a house puzzle. He repeated this word whenever he saw the pieces. During this routine, one day it happened that the doorbell rang. Without any difficulty in shifting from play situation to reality, he pointed to the door and called out "Hello!". This observation implies that child acquires certain forms of speech in a situation which provides the most salient clues to the meaning, and subsequently utilize and generalize them to similar situations.

Book reading situation has been also thought to serve the same function as play situation. In a book reading situation, child looks at a particular page in a particular book. And the adult's potential utterances are greatly constrained by the content of the book. Thus, the child encounters particular utterances recurring over the particular situations. This highly structured and frequently repeated routine has been regarded as the most appropriate linguistic context (Ninio, 1980; Ninio & Bruner, 1978). Snow and Goldfield (1983) traced the child's acquisition of specific lexical items and constructions by analyzing recurrent picture discussions between mother and child. They observed that the two partners were both talking about the same picture and were responsive to one another. In particular, almost all of the child's utterances were responded by the mother, whereas most of the maternal initiated utterances were not. In general, all the information units introduced by the child were likely to be responded by the mother's subsequent utterances. The authors interestingly found that there were strong contingencies between the informational units mentioned by the mother at earlier discussion and those mentioned by the child at the later ones. In 37.7% of the cases, the child took over the role of providing information units mentioned by the mother at the earlier discussion. It was assumed that the child acquired those verbal units mentioned by the mother through recurring situation of particular information. The author hypothesized that the child learned a particular lexical meaning by utilizing a strategy like identify a situation, remember what is said in it, say that yourself the next time the situation recurs. Situation-specific

utterances, routinization of situations and predictability of adult utterances from situation were suggested to constitute the optimal language-learning situation.

In sum, shared activities constitute a highly informational linguistic environment: While the child is paying attention to a certain object or event, a proper linguistic form is presented in a company with its referents. The child is provided with proper linguistic form for the referents.

Actual Modeling

A number of studies have demonstrated that linguistic input accompanied with concrete information does assist language acquisition. In a study conducted by Brown (1976), referent concreteness proved effective in promoting the child's syntactic comprehension. The author noted,

> Parents do not converse with young children about things or events that are not physically present until the children acquire some verbal competence. The text in which speech is learned is likely to affect acquisition of linguistic comprehension by influencing perceptual and symbolic coding processes governing observational learning. (1976;p. 187)

A hypothesis was proposed that the child's syntactic acquisition would be enhanced when a verbal model was accompanied with concrete reference. Subjects were divided into four modeling conditions: verbal modeling with enactment of the constructions, modeling with pictorial referents, modeling alone, and no-exposure control condition. As predicted, the group which received verbal modeling of grammatical constructions in conjunction with concrete referents showed greater comprehension than the other groups. The control group which did not receive any modeling failed to show any improvement in comprehension. The groups that were exposed either to verbal modeling with pictorial referents or to verbal modeling alone showed an intermediate level of comprehension. The effects of concreteness of referent were discussed from 3 aspects: salient information of relationship of agent-object, easy processing of cognitive representation, and high associability of real events to abstract linguistic structure.

A similar observation occurred in a study done by Tfouni and Klatzky (1983). The authors intended to investigate pragmatic and semantic influences on the child's deitic

comprehension. The subjects were divided into two groups: pragmatic group and semantic group. In the pragmatic group, deitic words (e.g., this, that, here and there) were accompanied with a pointing gesture, whereas semantic group was given the words without actual modeling. In each group, the children could take either of two roles: addressee and spectator roles. In the addressee condition, the children participated in the play situation and played the game with the experimenter. In the spectator condition, two experimenters played the game and the children just watched them playing. The children's response to the directions that the experimenter requested was recorded. As predicted, in a group comparison, the pragmatic group showed fewer deitic errors than the semantic group. Within each group, the role of spectators led to more errors than that of addressee. The data showed that the presence of a pointing gesture accompanying deitic words greatly facilitated the comprehension of the words. With regard to the effect of pragmatic deitic meaning, Tfouni et al. pointed out

> The child's linguistic representation of place and space is not sufficient by itself to provide all the information required by a pragmatic use of language, when the participants must situate themselves and their utterances in the context of the physical environment. The complement for the partial meaning furnished by the linguistic word for deixis is found by the child in the pointing performance.(1983;p.131)

In sum, it is apparent that concrete referents accompanied with actual gesture promote the child's understanding of words by providing sufficient clues for him to ease the problem of mapping cognitive representation of the words.

Recast Type of Communication

A number of studies have shown that mother's recasting types of communication (e.g., expansion and extension) are particularly effective for the child's language acquisition (Nelson, 1973, 1980). There are several explanations why the recast procedures are so effective for syntax acquisition (Strohner & Weingarten, 1982). The first explanation is concerned with the unchanged meaning of the child's utterances. It is assumed that in the recast communication, the words exchanged are quite clear to the child, so that the child is able to comprehend their meaning easily. The second explanation is related to the high attention and motivation of the child. It is thought that comments on the exemplars on which the child draws attention

facilitate the acquisition of appropriate syntactic structure. The third explanation involves that the expansion of language structure encourages more language practice and more effort to communicate fully.

Among the three explanations, the first one seems to be most plausible. In recast-types of communication, the child's utterance is reformulated in a more grammatically elaborated manner without changing the intended meaning. In other words, the child has received the most appropriate linguistic form for what he intends to express through the recast types of communication. Presumably, the recast types of speech facilitate the language development by providing the child with adult expression which encodes precisely the semantic relations that the child is intending to express at the time (Cross, 1978).

Many studies have shown that such types of communication facilitate the child's language development. For example, Nelson, Carskaddon, and Bonvillian (1973) conducted a study to test the hypothesis that the child's acquisition of syntax could be facilitated by an adult's provision of new syntactic information in relation to sentences of the child. The subjects were assigned to three conditions: recast sentence, new sentence, and control group. In the recast group, the experimenter responded with expansions to grammatically incomplete sentences produced by the children. In the new sentence group, the experimenter's response specifically excluded the content words of the children's preceding sentence. In the control group, no experimenter's intervention was involved. The results showed that children in the recast sentence group were more advanced in linguistic development than those who were in no treatment intervention. Children in the new sentence group showed no significant advance relative to the recast-sentence group. It was discussed that the adult's recast sentence which largely overlapped with the child's preceding utterances allowed him to compare the way in which his own surface sentence and the adult's surface sentence expressed some of the same underlying structural relationships.

Cross (1978) observed the same effect of recast type of communication. It was found that mothers of linguistically advanced children produced more recast and synergistic type of

communication than those of linguistically normal children. The author attempted to characterize and narrow down the list of effective features of mother's speech which facilitated the child's language development. The subjects were assigned to two groups--accelerated and normal group-- according to the scores on a test of comprehension. Mothers' speech of each group of children was examined with respect to various features of communication (e.g., syntax, discourse adjustments, speech style ,and references). Surprisingly, the results showed that there was no difference in syntactic aspects. Rather, a great difference was observed in discourse features. The mothers of accelerated group used significantly greater repetition of the children's utterances. Repetitions were presented in the form of complete or transformed expansions. They also produced larger number of semantic extensions than mothers of normal group. Furthermore, the mothers of accelerated group produced much greater proportion of synergistic sequence, of which utterances were mostly related to the children's preceding utterance. In contrast, the mothers of normal group were more likely to introduce semantically new utterances to the children's preceding utterances. These findings strongly suggest that mothers' speech which is semantically based on the children's preceding utterance, so that the children can easily understand the linguistic input, is more likely to facilitate language development.

In an attempt to characterize adult speech which predicts the child's language development, Barnes, Gut-Freund, Satterly, and Wells (1983) also found that extending utterances which picked up and elaborated, or added to the meaning that the child had just contributed, were significantly associated with the language growth. As in the study done by Cross, they did not find any significant intercorrelation between the mother's syntactic complexity and the child's level of language development. With regard to the effect of the extending utterances, they argued that adult input which had contingent relationship with the child's utterances enhanced the child's motivation to engage in conversation. For this reason, they predicted that extending utterances were significantly associated with the child's linguistic progress.

As the authors pointed out, motivational aspects of the contingent communication are also important, and constitute part of the effect. Nevertheless, many theorists tend to favor the informational interpretation. Expansion, semantic extension, maternal redundancy and elaboration of the child's preceding utterances are assumed to help the child to discover appropriate linguistic forms for what he means to express (Broen, 1972; Cross, 1975, 1978; Snow, 1972).

B. Social Class Differences

Social class differences in mother's behaviour largely lie in the "child-centered communication". MC mothers are more likely to behave from the child's perspective and to consider the child's attention and needs, whereas WC mothers are not. This general picture of social class differences has been found in various aspects of mother's behaviour. Firstly, let us consider the types of social control exerted by the mothers of each social class.

Types of Social Control

Bernstein (1961) conceptualized the mechanism underlining the transfer of social structure to parent's behaviour in terms of the linguistic code. According to him, mother's social status confines her accessibility to a certain linguistic code. While MC mothers have both the elaborate mode and the restricted mode of speech at their disposal, WC mothers have accessibility only to the restricted code. Through these linguistic codes, mothers of each social class transmit different regulatory strategies, cognitive styles as well as linguistic code. Bernstein (1970) distinguished the family system of each social class by the degree to which the individual member of the family played role in decision making. He identified the MC family with person-oriented role systems, and WC family with position-oriented role system. In the person-oriented MC family, the child is treated as an individual and allowed to achieve a role within the communication system in terms of his unique social, affective and cognitive characteristics. The psychological qualities and characteristics of the child are greatly

appreciated. In contrast, in the position-oriented WC family, individual role system is strictly distinguished by the status of the member within the family. Decision is made as a function of the status of the child, not of a quality or characteristics of the child. Thus, the communication system is more or less unilateral rather than reciprocal. In controlling the child's behaviour, MC mothers use personal controls, which are contingent on the specific problem, context, and nature of the child. They are more likely to use appeals rather than unilaternal imperatives. In contrast, WC mothers produce more imperatives. The content of the control is oriented and sensitive to the child's positional hierarchy rather than to individual qualities.

In a study done by Cook-Gumperz (1973), Bernstein's main thesis of person-, position-oriented role system was exactly replicated. She explored the responses to the questions of social control given by the mothers and their child. Consistent with Bernstein's theory, MC mothers used more personal controls and child-oriented affective appeals, whereas WC mothers used more imperative controls. Wootton (1974) also observed that in a control context, MC mothers were more likely to solicit intent from the child (e.g., wants, hopes, abilities, likes, and dislikes etc). In presenting a control statement, MC mothers used greater proportion of non-regulative statements; they made their controlling command so explicit that the child could understand the reason for being controlled. Thus, MC mothers' controlling statements took the form of strong suggestions and justifications. In contrast, WC mothers used more frequently negative indirectives or imperatives.

The WC mothers' unilaternal type of control technique was also confirmed in a study done by Kamii and Radin (1967). They observed that WC mothers, in influencing the child's behaviour, used such techniques as commanding without explanation (35%), requesting without explanation (25%), coaxing and warning or threatening (6%). On the other hand, MC mothers used more frequently consulting (14%), and gentle requests with explanation (12%). On the whole, MC mothers tended to consider the child's intention and need in influencing the child's behaviour, whereas WC mothers used more unilateral techniques, which did not consider the child's position or needs.

Hess and Shipman (1965, 1967) also recognized such distinctive control types of each social class and suggested 3 types of speech acts used by mothers to control the child's behaviour: appeals to authority, subjective-personal appeals, and cognitive-rational appeals. They designed a research to examine mothers of different social classes with respect to these control styles. Consistent with the other studies, MC mothers used few imperative appeals. Instead, they used more appeals to reason. WC mothers used more imperatives and fewer cognitive rational type of controls. In addition, they found, imperative control techniques were negatively associated with intellectual performance, whereas subjective-personal and cognitive-rational techniques showed positive correlation with intellectual performance. In general, in controlling the child's behaviour, MC mothers tended to consider the child's situation and his needs, whereas WC mothers unilaterally carried the control statement without taking into account the child's characteristics.

In sum, the locus of MC mothers' control lies in the child's personal characteristics, whereas WC mothers' control is primarily based on their positions or authority. This difference is manifested in the MC mothers' person-oriented role system and bilaternal communicative patterns, and in the WC mothers' position-oriented role system and unilaternal communication.

Specificity of Linguistic Input

Another source of information supporting the social class differences in child-centered communication is found in the studies of cognitive aspects of mother's speech. Hess and Shipman's (1965) classic study of SES differences in mother's speech observed that mothers from different social classes showed variations in the degree of specificity in relational terms that focused the child's attention on characteristics of materials. WC mothers were observed to act without taking sufficient time for reflection and planning in their interaction with the child. As a consequence, their speech was less likely to be related to the child's preceding act. It lacked meaning; it was not sufficiently related to the context in which the communication

occurred, to the motivations of the participants, or to the goals of the task. On the whole, cognitive environment that WC mothers provided was less controlled by attention to the individual characteristics of a specific situation. In contrast, MC mothers tended to provide precise and essential information necessary for solving the problem. Their information was context- and problem-specific, so that the child could efficiently utilize the information. Furthermore, social class differences were also observed in the content of the information. WC mothers tended to provide immediate and direct solution. As a consequence, the child received less chance to reflect on and anticipate the consequences of his actions. On the other hand, MC mothers provided precise and essential, but suggestive information and led the child to reflect on the problem and to foresee the consequences of his action. In summarizing the findings, the authors suggested that SES differences lay in the extent to which mothers placed the behaviour of their child in a context of meaning; in the extent to which the information was relevant to the person or the context.

The same idea was reviewed by Brophy (1970). Mothers and children were given the task to sort the blocks into four groups according to height and mark. Mothers were asked to teach the child to perform the task. Mothers' verbalization of specific labels and focusing behaviours were recorded over 3 situational conditions: orientation period, pre-response instructions, and post-response feedback. The purpose of the introduction of situational variables was to examine mother's behavioural variation occurring as a function of situational pressure. As consistent with Hess and Shipman's findings, MC mothers were observed to make more relevant attributes more salient to the child. MC mothers were more likely to supply a specific label referring to the attributes of the blocks and to draw the child's attention to the relevant attributes by making them more salient in his perceptual field.

In a study done by Bee et al. (1969), the same picture of social class differences in maternal teaching strategies emerged. In the problem solving situation, MC mothers were more likely to produce a helpful statement soliciting a change or modification of the child's activity; they were less likely to introduce non-verbal behaviour, such as a moving model, or handing

the child a block to use. They tended to make an effort to lead the child to solve the problem with appropriate information. In contrast, WC mothers tended to give specific and detailed solutions to the problem, so that the child was deprived of chances to reflect on the problem and to foresee the solutions.

In sum, the findings drawn from this group of studies appear to confirm the idea that social class differences lie in the child-centered communication. MC mothers tend to allow the child to work at his own pace, offering precise and essential structuring suggestions leading to a solution. They encourage the child to explore the problem on his own. But WC mothers tend to provide a complete and detailed information and interrupt the child's activity. As a consequence, the child is less likely to have an opportunity to fulfill his capability.

General Interactional Attitude

Another distinctive feature of mother's behaviour in which large social class differences are predicted is concerned with the mother's general attitude about interaction with the child. In general, MC mothers have more active dialogue style, whereas WC mothers are characterized by passive dialogue style. The earlier study conducted by Zunich (1961) already noticed this general picture of social class differences in child-rearing attitudes and maternal behaviour. MC mothers were observed to show higher score on contacting, directing, helping, interfering by structuring, observing attentively, and playing interactively. WC mothers were higher on the categories of remaining out of contact; they were less likely to initiate a cooperative interaction with the child.

Wootton (1974) reported the same observation. Analysis of mother's behaviour outside of the control context showed that WC mothers questioned their child less than MC mothers; WC mothers also made fewer remark. Even when they were given chances to extend the conversation, WC mothers were more likely to miss the opportunities and to discontinue the dialogue. On the other hand, MC mothers tended to take up more opportunities in dialogue and to provide more additional information which enabled the child to elaborate on the ongoing

topic. It was discussed that such an extended dialogue by the mothers functioned to transmit information defined by adults as relevant to the discussion and to encourage the child to extend his knowledge of the relevant topic.

WC mothers' passive role in interaction with child was also noted by Kamii and Radin (1965). The authors made an observation of mother's behaviour to the child's expressed needs. On the whole, WC mothers were less likely to respond to the child's demands than MC mothers. Consequently, WC children received less gratifying responses than MC children when they attempted to receive such responses. Furthermore, MC mothers showed larger proportion of mother-initiated interaction on the child's implicit demand of companionship and affection; WC mothers were relatively less sensitive to the child's implicit solicitation of needs. These findings strongly suggest that MC mothers are more willing to attend to the child's needs; and this underlying attitude is reflected on their relatively high frequency of responses to the child's demand and mother-initiated interaction.

Studies examining the mother's behaviour with respect to various situational variables also present a strong support for the hypothesis of active-MC mothers vs passive-WC mothers. A number of studies have predicted larger social class differences in situations where mothers have more freedom in initiating and structuring the interaction. In a study done by Brophy (1970), most consistent differences favoring the MC mothers over the WC mothers occurred in the orientation period and preresponsive instruction period. During the orientation period, the mothers were invited to explain and to demonstrate the task to the child before providing the first specific instruction for solving the problem. The preresponse instructions involved mother's any directions to the child before she made each response. Thus the child's performance under these two situations was largely dependent on the mother's effort for helping the child to focus on the task and providing the specific response process. The result was interpreted that MC mothers were more proactive, whereas WC mothers were passively reactive in enacting communicative interaction with their child.

Snow et al. (1976) also presented a similar result: Most significant social class differences were found in the free-play situation in which situational support for communication was less than in a situation like bookreading. Dunn et al. (1977) observed the same phenomena. They found that mother's speech in the context of joint attention to pictures or books was linguistically rich. In the book context, mothers produced more semantically related utterance, more synergistic sequence, and less controlling behaviours, which were confirmed to be positively related to the child's language development. Of importance, while there were social class differences in the frequency of these features in other context, no such differences were observed in the book reading context. At the purely empirical level, these findings suggest that social class differences will be minimized in situations which circumscribe the possible range of parental behaviour, whereas more pronounced SES differences should occur when mother has more freedom in initiating and structuring interaction. On the whole, WC mothers tend to take less effort to initiate and structure the communicative interaction so as to make it interesting as well as instructive unless they are pressed by situational factors.

Schachter and Strage (1982) also recognized the SES differences in mother's attitude in enacting communicative interaction with the child. They distinguished two types of speech pattern for each social class: "speaking-to-child" and "speaking-with-child". WC mothers' speech was characterized by speaking-to-child. They showed more frequent use of directives, direct instruction, and refusals. Also they were described to be primarily concerned with controlling the child's behaviour and his environment rather than with maintaining attentive communication with the child. On the other hand, MC mothers' speech was characterized by the pattern of speaking-with-child. They were more likely to initiate a sequence of conversation, responding to a prior utterance of the child, and usually continue the topic introduced by the child.

An evidence supporting Schachter and Strage's distinction of speaking-with and -to -child is drawn from a study done by McDonald and Pien (1982). On the basis of the previous studies suggesting that syntactic, semantic or various discourse features of mother's speech are

just reflections of mother's speech intent, they examined interrelation between two proposed speech intents: "conversational intent" and "control intent". They found that mother's speech characteristics could be polarized around the two negatively related intent clusters. They concluded that if this was the case, mother's speech characteristics must be largely determined by her underlying intention either to control or to converse with the child. Of interest is that speech features belonging to control-intent cluster showed a parallel to those of WC mothers' speech, whereas speech features clustered in conversational intent were analogous to MC mothers' speech. For example, directives and imperatives, which were typical of WC mothers' speech style comprised of the control intent cluster, whereas the use of frequent questions and encouragement of equal participation, which represented MC mothers' speech style, constituted the conversational intent cluster.

These findings are very suggestive and to a large extent consistent with other studies reviewed in the preceding section. They are likely to lead to a conclusion that MC mothers' speech style is determined by conversational intent and WC mothers' by control intent. But a caution must be taken in drawing such conclusion. Depending on the child's behaviour or situational factors, mother's speech intent may change frequently. For example, when the MC mother sees need to restrict the child's behaviour, she will also resort to a controlling or restricting command. Thus, it is not desirable to polarize mother's speech of each social class at either of the two extreme speech intents. Rather, at this point, it will suffice to hypothesize that social class differences of mother's speech partly lie in mother's leadership role in initiating and maintaining the communicative interaction with the child; and this underlying attitude largely determines the various speech variables, such as syntactic, semantic, or discourse features.

Linguistic Features

As pointed out in the part I, there have been relatively few studies which examine the linguistic aspects, especially discourse features of mother's speech of each social class. Snow et

al.'s (1976) study is one of the few studies focusing on the linguistic aspects of mother's speech. They found that WC mothers' speech was significantly associated with poor language growth; their speech involved high frequency of imperative, which were found negatively associated with language development, and little substantive deixis, which were positively correlated with growth in vocabulary (Newport, 1974). In contrast, MC mothers were observed to produce more expansions of child's utterances. WC mothers offered no expansions; they just repeated their own utterance, both exactly and partially. Schachter (1979) also observed the same phenomena. MC mothers produced more repetitions of the child's speech. WC mothers produced more exact repetition. They also showed more frequent use of directives. 50% of the WC mothers' speech consisted of directives. These findings evidently suggest that MC mothers' speech would be more likely to assist the child's language development than WC mothers.

IV. METHODOLOGY

A. Sample

The samples of 10 high class mother-child dyads and 10 low class mother-child dyads were drawn from the Seoul area to represent the two social groups. The mothers were those that the researcher's family knew. They were contacted by either phone or visiting. They were told that the research involved an investigation of child's language development. That the mother's speech was the focus of the study was not mentioned. SES variable was not also mentioned.

The mother-child pairs were initially assigned to either of the two social groups on the basis of crude sampling of the father's occupation, using professional job for the High Class (HC) and non-professional job for the Low Class (LC).[4] A more precise comparison was then made by checking each sample against Korean Occupational SES Index [5](Hong et al., 1982). In addition to the father's occupation, the mother's educational level was also taken into consideration. Those families that fell toward the extremes of the SES Index and educational levels were assigned to high and low class groups, respectively.

Occupations of the HC fathers included clerical supervisors (60%), university professors (20%), medical doctor (10%), and newspaper editor (10%). Most of the HC subjects were living in a two or three-bedroom apartment. The apartments were all located in the southern part of Seoul, where expensive apartments were recently built up. The rest of the HC subjects had a private house which had more than three bedrooms. The HC group houses were well furnished with decent furniture and provided with most of the so called "cultural facilities", such as TV set, audio set, or musical instrument (e.g., piano).. etc. More than half of the HC subjects owned their own private car. On the average, the HC mothers completed more than the third year of university education. And nine out of ten HC mothers did not work

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[4]Since the upper social class samples were in fact High Class rather than middle class, they are referred to high class, whereas the WC mothers were referred to Low Class.

[5]See appendix 1.

and spent most of the time at home.

On the other hand, the LC fathers had occupations of which SES index was below 50, such as printing, driver, or labourer. One of the remarkable aspects of the LC living environment was that most of the LC families did not own their own house or apartment. 90% of the LC subjects had only one bedroom rented in a private house. In that case, they were provided with a small space for cooking attached to the room, with no bathroom or living area. The single room served the purposes of sleeping, living, and eating. But most of the LC families had at least the basic electrical items such as TV set, radio, or fridge, eventhough those were all packed in the small single room. The LC mothers finished their education up to junior high school which was equivalent to grade 9, and like the HC mothers, all of the LC mothers did not work.

The children's age ranged from 25 to 34 months. Children who showed any indication of physical or mental disability were excluded. Children's sex, age, birth order, and the number of siblings of were controlled. The descriptive data for the two social groups are shown in Table 1.

Table 1: Descriptive Data for the Two Social Classes

	High Class	Low Class	*t*-value
N	10	10	
SEX	F:2 M:8	F:2 M:8	
Age	28.4 mon.	29.2 mon.	
Birth order	1.4	1.3	
No. of sibling	.5	.9	
Fathers' occupation[1]	72.77	36.72	9.28***
Mother's education(years)	15.6	9.00	5.96***

*** $p<.001$, two-tailed.

1 SES index

B. Observational Procedure

The observational procedure consisted of a single instance of the researcher's visiting the home of each subject. At the time and date convenient to the respective mother-child dyad, the researcher made a home visit. At first, the mother was given a rough idea about the research and procedures that she was going to participate in. The mother was told that the research was concerned with child's language development during toddlerhood. That the mother's speech was the major interest of the research was not mentioned. It was explained that there would be two 15 minutes of interactional sessions and that she would spend time with the child reading books and playing with toys. The mother was informed of the recording procedure, and also assured that there was nothing aversive to the child's development and that the data collected from the observations would be used for research purpose only. The main goal of the first part of the visit lay in establishing a friendly atmosphere with the mother and the child. Thus, having explained to the mother about the research and the observational sessions, the researcher chatted for a while with both the mother and the child. Since the mothers already had an acquaintance with the researcher, the whole procedure in each sample went in a friendly and relatively easy atmosphere.

After a lengthy warm-up period, the two sessions of interaction started. The first observation was to examine the mother's speech in a bookreading situation. The mother was told that the purpose of the particular session was to study the child's verbal reaction to the pictures in books. The mother-child dyad was then given several picture books that the researcher had prepared. The mother was encouraged to look at the books with the child as she normally did. In a couple of minutes that they started looking at the books, a tape-recorder was switched on and placed near them. While the mother and child were engaged in reading the books, the researcher was present in the same room and observed them interacting. The bookreading interaction continued for 15 minutes.

After having a break on completion of the first session, the second toyplaying session started. The second session involved an examination of the mother's speech in a toyplaying

situation. But the mother, like in the case of the first session, was told that the observation was to evaluate the child's verbal production in a toyplaying situation. The mother-child dyad was provided a bagful of toys and invited to play together. It was explained that there was no specific way of playing with the toys. The mother was repeatedly encouraged to act as naturally as possible. While they were playing together, the researcher was present in the same room and observed them. The second session also continued for 15 minutes.

On completion of the two interactional sessions, the researcher inquired of the mother the father's occupation, her educational level, and the other personal data of the child. Having finished the whole procedure, the researcher explained the real purpose of the research and the reason that it had to be masked to the mother, and asked a permission to use the data. In most cases, the mother was cooperative. Finally, the researcher thanked the mother and presented a small gift to the child.

In conducting the observational sessions, every attention was given to put the mother and the child at ease, and to construct each observational situation so friendly and comfortable that the mother-child dyad could behave normally and naturally as close as possible to their routine interaction. The following efforts were made particularly. Firstly, while the researcher was observing the mother-child interaction, no observational note was made in front of the sample. Any important or necessary notes were made shortly after the researcher's leaving the sample's house. Secondly, no questionnaire was used to obtain the sample's personal data. The information was obtained through a friendly conversation with the mother. Thirdly, not many restrictions were imposed on the child's behaviours as long as the child stayed inside the room. When the child insisted on reading his own books or on playing with his own toys, he was allowed to do so. Such a case occurred once in one of the high class samples. Fourthly, the observation sessions took place wherever the mother and child felt comfortable. And each session was preceded by a lengthy warm up period.

While the observation sessions were in progress, other members of the family were not present. Sometimes, however, the child's sibling was present in the same room. This was

inevitable in the low class families, most of which had only one bedroom without any other living area. In that case, the sibling was allowed to stay in the same room, but it was made sure that no interaction occurred between either of the mother-child dyad and the sibling. When the child turned his attention to the researcher, he was responded in a minimal way and encouraged to go back to the mother.

C. Materials and Equipment

In order to make the interactional situations more or less the same for all the mother-child dyads, the researcher supplied the playing and reading materials. For the bookreading situation, six picture books were selected among those widely read by toddlers in Korea. Two of them were story books which contained short texts as well as relevant pictures. The rest of the books mainly consisted of various pictures of animals, vehicles, social life , and so on. To vary the mother's verbal repertoire, each book was selected in such a way that it contained different themes of pictures.

For the play situation, a bunch of toys were prepared. The toys included a Ko-Ko-Brick set, which was most welcomed by toddlers in Korea, a play-house kit, and a telephone set. The toys were simple enough for the child to play with without requiring any instruction from the mother.

Sony microcasette-recorder M-100 was used for recording. The recorder was approximately 56, 112.5, 12.7mm (w/h/d). It had two choices of type speeds: 2.4cm/s and 1.2cm/s. At the 2.4cm/s position, a 60 minute recording was possible on both sides of the Microcasette MC-60, whereas at the 1.2cm/s position, a 120-minute recording was possible. To produce the best sound quality, 2.4cm/s position was selected.

D. Scoring Procedure

Mother's speech under the two situations was transcribed. Child's utterances were also transcribed, for these were necessary for examining mother's speech in relation to the child's preceding utterances. Songs, unintelligible words, intrapersonal talks, or utterances spoken to the researcher were excluded. Comments drawn from the observational notes and the recordings were entered in parentheses to clarify the meaning of the utterances. Unfortunately, since there was no Korean assistant available for helping the researcher with transcription, the transcribing work was done by the researcher alone. The complete transcriptions underwent three times of checking.

A basic scoreable unit was an utterance. In most previous studies, an utterance has been defined by phonetic cues or pauses. Single words, phrases, or grammatically complete or incomplete sentences have been defined as an utterance if their phonetic pauses are clear enough to announce them as a single utterance contour. This phonetic criterion, however, is not sufficient to stand as a proper criterion for defining an utterance. There is no definite measure as to how long a pause should be to be declared an utterance contour. Furthermore, the phonetic criterion tends to shatter a meaningful sentence contour into a series of stammering speech. Considering the difficulties and problems with the phonetic criterion, in the present study, a second criterion was added: When phonetic cues were not clear, semantic contour stood as the next criterion.

1. When words within a single sentence contour were stuttered with short phonetic pauses, the whole sentence contour was scored as a single utterance.
2. When introductory words or habitual responding words, like "Ung", "Uh", or "Grae", which were equal to "Yeah", were followed by a main clause, they were combined with the main clause and scored as a single utterance.
3. Single words, particularly those repeated at the end of a sentence were also combined with a main clause and scored as a single utterance.
4. When single words were uttered in parataxis, or repeated with lengthy phonetic pauses in

between, each occurrence was scored an independent utterance.

5. If the phonetic pauses were not decisive, the words were strung together and scored as a single utterance.

In general, retaining the main idea of the phonetic criterion, efforts were made to segment or combine words to present them in a semantically meaningful unit.

The transcribed utterances were assigned three major feature scores: informational property, interpersonal function, and leadership role. For examining the informational property of an utterance, the recast-type of communication categories was adopted. These categories included imitation, semantically related speech, repetition, and synergistic sequences. For checking the interpersonal function of mother's utterances, Schachter's FIS-C system was used. Since some of the definitions in the original FIS-C system did not fit into the present research conditions, each category was redefined. For measuring the mother's leadership role, Kaye and Charney's (1981) concept of turnabout was introduced. A turnabout is a structural unit in discourse that unequivocally both responds to the child (Response) and expects a further response from the child (Mand).

Those three major features were selected on the grounds 1)that they might positively influence the rate at which the child acquired language, 2) that they might be able to scrutinize mother's speech for informational property, 3)that they were also able to check interpersonal function of mother's utterance and, 4)that they are able to measure mother's leadership role in initiating and maintaining communicative interaction with the child. For the details of each category, See appendices 2, 3, & 4. Mother and child speech samples and the scoring procedures are presented in appendix 5.

E. Hypotheses

The general hypothesis guiding the present study was that there would be social class differences in those facilitative features of mother's speech for the child's language development. On the basis of the presently available literature and theoretical background

reviewed in the previous chapters, the following operational hypotheses were drawn.

1. HC mothers will produce more semantically related speech than LC mothers.
   a. HC mothers will produce more expansion than LC mothers.
   b. HC mothers will produce more extension than LC mothers.
   c. HC mothers will produce more synergistic sequential utterances than LC mothers.
2. LC mothers will produce more exact imitation than HC mothers.
3. LC mothers will produce more exact repetition than HC mothers.
4. HC mothers' speech will be more likely to be alter-ego speech.
   a. HC mothers will be more likely to explicate and elaborate the child's preceding communication.
   b. HC mothers will make more reports on the child as well as on mother herself, others and things.
5. LC mothers will produce more commands and restrictions than HC mothers.
6. HC mothers will make more turnabout than LC mothers.
7. LC mothers will produce more mand than HC mothers.
8. HC mothers will produce more response than LC mothers.

F. Analysis and Results

Reliability

Since the scoring procedure was accomplished by the experimenter alone, inter-rater scoring reliability was not included. Instead, mean percentage of error scores, that is, a degree of scoring agreement was calculated through the researcher's double checking procedures. The levels of agreement in the three major speech systems are presented in Table 2.

Table 2: The Mean Percentages of Scoring Errors in the 3 Major Speech Systems

		System		
Group	n	Recast-co.	FIS-C	Turnabout

HC	10	9.6	7.6	8.9
LC	10	9.7	8.7	8.9

It was noted that all of the three systems promised more than 90% of scoring agreement. This level of agreement was accepted as adequate, though it was based on the researcher's repeated scoring procedures.

Statistical Analysis

The mean percentage of each feature of mother's speech was calculated by dividing the frequency of each feature by the total number of utterances that a mother produced. t-test for independent samples was carried out to examine the social class differences in the mother's various speech features. t-test for dependent samples was used to determine the influence of situational factors on the mother's speech. Significance of difference was determined at the level of 95%, 99%, or 99.9%.

Since the variances were fairly homogeneous, non-parametic tests, such as Mann-Witney U test or Wilcoxon test, which was respectively equivalent to t-test for independent samples and to t-test for dependent samples, were not used. Welch-t test for unequal variances was carried out. But the Welch-t values were not entered in the tables, because they were almost the same with the regular t-test values.

All computations were done by DERS programs at the University of Alberta.

Results

Total number of maternal utterances

The total mean number of maternal utterances of each sample under the bookreading and the toyplaying contexts was calculated and presented in Table 3.

Table 3: Total Mean Frequency of Maternal Utterances of the HC and LC Groups in Bookreading and Toyplaying Situations

Context	Group		*t*-value
	HC	LC	
Book	357.4	300.1	
Toy	276.4	190.5	2.31•
Total	633.2	490.6	2.67•

• $p<.05$

On the whole, the HC mothers produced a significantly greater number of utterances than the LC mothers. When the two groups were compared in each context, a significant difference was found in toyplaying situation, but not in bookreading situation. It was concluded that the LC mothers produced far less number of utterances in toyplaying situation.

Hypothesis 1: HC mothers will produce more semantically related speech than LC mothers.

1. HC mothers will produce more expansion than LC mothers.
2. HC mothers will produce more extension than LC mothers.
3. HC mothers will produce more synergistic sequences than LC mothers.

Table 4: The Mean Percentages of Semantically Related Speech and Synergistic Sequences of the HC and LC Mothers in Bookreading and Toyplaying Situations

Speech features	Situation	Group		*t*-value	
		HC	LC	HC-LC	BR-TP
Semantically related utterances(total)	BR	14.4	8.3	3.78•••	
	TP	11.8	5.6	5.01•••	
	Total	26.2	13.9	5.85•••	
Incomplete expansion	BR	3.6	1.7	2.18•	
	TP	2.5	.9	3.01•••	
	Total	6.1	2.6	3.78•••	
Elaborate expansion	BR	2.9	1.6		
	TP	2.6	.7	3.80•••	2.86•(LC)
	Total	5.5	2.3	4.55•••	
Noun-phrase extension	BR	6.9	4.5		
	TP	5.3	2.4	3.37••	3.28••(LC)
	Total	12.2	6.9	2.71•	
Predicate extension	BR	1.0	.5		
	TP	1.4	1.6		

	Total	2.4	2.1		
Synergistic sequence	BR	11.9	6.4	4.36***	
	TP	12.8	9.1	2.43*	-3.62**(LC)
	Total	24.7	15.5	4.05***	

** $p < .01$

In the total number of semantically related speech, the HC mothers significantly exceeded the LC mothers. This significant increment for the HC mothers existed in both bookreading and toyplaying situations. At the subcategorical levels, the HC mothers showed significantly higher proportions of incomplete expansion, elaborate expansion, and noun-phrase than the LC mothers. In incomplete expansion, the significant difference occurred in both two situations. In elaborate expansion, significant increment for the HC mothers was observed in toyplaying situation only. While the HC mothers maintained the almost the same proportions of elaborated expansion over the two situations, the LC mothers produced significantly less amount of elaborated expansion in toyplaying situation. The same observation occurred in noun-phrase extension. The significant social class difference occurred in toyplaying situation. The LC mothers tended to produce less amount of noun-phrase extension in toyplaying situation.

It was also noted that the HC mothers produced a significantly greater number of synergistic sequences than the LC mothers. This significant difference was found in both bookreading and toyplaying situations. Hypothesis I was supported. While the HC mothers showed a fairly consistent proportion of noun-phrase extension over the two situation, the LC mothers were observed to produce less synergistic sequence in bookreading situation.

Hypothesis II: LC mothers will produce more exact imitation than HC mothers.

Table 5: The Mean Percentages of Imitations of the HC and LC Mothers in Bookreading and Toyplaying Situations

		Group		*t*-value	
Speech features	Situation	HC	LC	HC-LC	BR-TP

Imitation(total)	BR	10.4	10.4		
	TP	9.4	7.3		
	Total	19.8	17.7		
Exact imitation	BR	5.9	6.8		2.82*(HC)
	TP	3.6	3.6		3.07*(LC)
	Total	9.5	10.4		
Partial imitation	BR	2.7	2.6		
	TP	3.2	2.3		
	Total	5.9	4.9		
Transformed imitation	BR	.9	.1	3.15**	
	TP	1.6	.7		
	Total	2.5	.8	2.43*	
Paraphrase imitation	BR	.9	.9		
	TP	1.0	.7		
	Total	1.9	1.6		

On the whole, the HC mothers made more imitations than the LC mothers, although the difference was not significant. Exact imitation was the only feature in which the LC mothers exceeded the HC mothers. But the data showed that the difference was not significant. The data failed to support Hypothesis II. Both groups showed significantly more exact imitation in bookreading situation than toyplaying situation.

A significant social class difference was observed in transformed imitation. The HC mothers made significantly more transformed imitation than the LC mothers in bookreading situation.

Hypothesis III: LC mothers will produce more exact repetition than HC mothers.

Table 6: The Mean Percentages of Repetition of the HC and LC Mothers in Bookreading and Toyplaying Situations

		Group		*t*-value	
Speech features	Situation	HC	LC	HC-LC	BR-TP
Repetition(total)	BR	6.7	7.2		
	TP	6.8	6.3		
	Total	13.5	13.5		
Paraphrase repetition	BR	1.0	.6		
	TP	1.0	.5		
	Total	2.0	1.1		
Exact repetition	BR	1.7	2.7		
	TP	1.7	1.9		

	Total	3.4	4.6
Partial repetition	BR	2.8	2.7
	TP	3.0	3.2
	Total	5.8	5.9
Transformed repetition	BR	1.2	1.2
	TP	1.1	.7

No significant social class differences were found in any of the repetition features. Hypothesis III was therefore rejected.

No significant situational differences were observed in both groups.

Hypothesis IV: HC mothers' speech will be more likely to be alter-ego speech.

1. HC mothers will be more likely to explicate and elaborate the child's preceding communication.
2. HC mothers will make more reports on child as well as on mother herself, others and things.

Table 7:[4] The Mean Percentages of FIS-C Alter-ego Related Speech of the HC and LC Mothers in Bookreading and Toyplaying Situations

		Group		*t*-value	
Scores	Situation	HC	LC	HC-LC	BR-TP
R to Ch desire(total)	BR	1.6	.6		
	TP	.7	1.5		
	Total	2.3	2.1		
R to Ch learning implementing (total)	BR	15.4	13.8		4.33**(HC)
	TP	6.2	5.7		3.34**(LC)
	Total	21.6	19.5		
Explicate	BR	2.4	1.2		
	TP	1.4	.4	2.89**	3.15**(LC)
	Total	3.8	1.6		
Explicate +	BR	1.1	.4		
	Total	1.1	.4		
Confirm	BR	5.3	5.3		3.74**(HC)
	TP	2.0	.9		4.66**(LC)
	Total	7.3	6.2		
Confirm +	BR	2.6	2.2		
	TP	1.1	.9		

[4] When the frequency did not exceed 1% in either of the social groups, the scores of categories or subcategories were not calculated.

	Total	3.7	3.1		
Supply new learning	BR	2.8	2.4		
	TP	1.4	2.9		
	Total	4.2	5.3		
Correct	BR	1.2	2.3		
	Total	1.2	2.3		
R to Ch report(total)	BR	11.5	6.5	3.72**	2.46*(HC)
	TP	7.4	7.0		
	total	19.9	13.5		
Explicate	BR	3.0	1.6	2.69*	
	TP	2.1	.8	2.40*	
	Total	5.1	2.4	3.58**	
Seek elaboration	BR	1.7	1.5		
	TP	1.0	2.4		
	Total	2.7	3.9		
Seek elaboration +	BR	2.9	.6	2.51*	
	Total	2.9	.6	2.51*	
Confirm	BR	2.2	1.5		
	TP	2.4	1.5		
	Total	4.6	3.0		
Confirm +	BR	1.7	1.3		
	TP	1.5	2.0		
	Total	3.2	3.3		
Report on Ch(total)	BR	5.4	2.4	2.53*	
	TP	6.3	5.5		-3.97**(LC)
	Total	11.7	7.9		
Specific interrogative	BR	2.5	.8	2.23*	
	TP	2.8	2.3		
	Total	5.3	3.1		
General interrogative	BR	1.1	.6		
	TP	1.8	1.7		-3.98**(LC)
	total	2.9	2.3		
Report on self,others,&things	BR	15.9	10.3	2.34*	
(total)	TP	13.4	8.0	2.51*	
	Total	29.3	18.3	3.28**	
Self	TP	1.0	1.1		
	Total	1.0	1.1		
Things	BR	8.7	5.3		
	TP	7.4	4.4		
	Total	16.1	9.7		
Inducing report	BR	6.4	4.5		3.48**(HC)
	TP	3.9	1.1	3.76**	2.94*(LC)
	Total	10.3	5.6	2.73*	

The subcategories of *R to Ch desire* had less than 1 % of frequency, so that they were not listed. Instead, the total frequency of the category was calculated and compared. There were no significant social class differences.

For *R to Ch learning implementing*, a significant increment for the HC mothers was found in *Explicate*. The difference was observed in toyplaying situation and when the two situations were studied together, but not in bookreading situation. The HC mothers' significantly higher score on *Explicate* was also observed in *R to Ch report*. The HC mothers explicated the child's report twice as much as the LC mothers in both bookreading and toyplaying situations. They also showed a significantly higher score on *Seek elaboration+* , which elaborated the child's reporting utterances more fully. The observation held true in bookreading situation and when the two situations were examined together. On the whole, the HC mothers were more likely to respond to the child's report than the LC mothers. This observation was significant in bookreading situation. The data supported Hypothesis IV(1).

For *Report on Ch*, a significant increment for the HC mothers was observed in *Specific interrogative* of bookreading situation. On the whole, the HC mothers made significantly more reports on the child in bookreading situation. For *Report on self, others and things*, almost same observation occurred; the HC mothers made significantly more reports than the LC mothers. The significant increment for the HC mothers held true in both bookreading and toyplaying situations.

At subcategorical level, *Inducing Report* on things showed a significant increment for the HC mothers in toyplaying situation and when the two situations were combined. The data confirmed Hypothesis IV(2).

For a situational analysis of the categories, both HC and LC mothers showed a significant increment for bookreading situation in the total frequency of *R to Ch learning*. The same observation occurred in *Confirm* ; both groups showed significantly higher proportion of *Confirm* in bookreading situation.

For *R to Ch report*, a significant situational difference was found in the HC mothers; the HC mothers produced a higher proportion of responses to the child's report in bookreading situation. But in the category score of *Report on Ch*, the situational difference occurred in the LC mothers only. On the whole, the LC mothers were less likely to make report on Ch in

bookreading situation. At subcategorical level, *General interrogative* showed a situational difference in LC mothers; they were less likely to make report on Ch in bookreading situation. For the *Report on self, others and things*, *Report inducing* showed a significant situational difference; both social groups showed significant increment for bookreading situation.

Hypothesis V: LC mothers will produce more commands and restrictions than HC mothers.

Table 8: The Mean Percentages of FIS-C Restrict-command' of the HC and LC Mothers in Bookreading and Toyplaying Situations

		Group		*t*-value	
Scores	Situation	HC	LC	HC-LC	BR-TP
Restrict-command (total)	BR	.5	2.0		
	TP	.4	4.0	-3.48**	
	Total	.9	6.0	-3.09**	

In the total frequency of *Restrict-command*, the LC mothers significantly exceeded the HC mothers. The general increment of *Restrict-command* for the LC mothers was observed in both bookreading and toyplaying situation. But a significant difference occurred in toyplaying situation only. Hypothesis V was confirmed.

An analysis of situational difference of *Restrict-command* in both social groups showed that both the HC and LC mothers produced fairly consistent number of *Restrict-command* over the two contexts.

Miscellaneous FIS-C Scores

Table 9: The Mean Percentages of Miscellaneous FIS-C Scores of the HC and LC Mothers in Bookreading and Toyplaying Situations

		Group		*t*-value	
Scores	Situation	HC	LC	HC-LC	BR-TP

'Since the subcategories did not exceed 1% of frequency, only the total categorical scores were calculated.

R to Ch collaboration	BR	8.8	5.8		
Dramatic play	TP	1.5	2.7		
	Total	1.5	2.7		
Role-differentiated play	TP	7.2	2.6		
	Total	7.2	2.6		
Activate(total)	BR	4.6	3.7		-2.64*(HC)
	TP	10.6	13.8		-3.82**(LC)
	Total	15.2	17.5		
Induce participation	BR	1.6	.7		
	TP	2.3	2.4		
	Total	3.9	3.1		
General activation	BR	2.6	2.8		-3.08*(HC)
	TP	8.0	11.1		-3.95*(LC)
	Total	10.6	13.9		
Provide knowledge &teach	BR	17.4	20.9		9.13***(HC)
	TP	7.4	10.4		4.44**(LC)
	Total	24.8	31.3		
Provide knowledge	BR	1.4	1.2		
	Total	1.4	1.2		
Teach words	BR	4.1	6.7		5.53***(HC)
	TP	.8	3.6	-3.55**	
	Total	4.9	10.3	-2.33*	
Elicit knowledge	BR	11.9	13		6.87***(HC)
	TP	5.0	4.6		6.33***(LC)
	Total	16.9	17.6		
Total responsive score	BR	28.8	20.9	2.74*	
	TP	23.1	20.0		
	Total	51.9	40.9	2.27*	
Total spontaneous score	BR	43.8	39.3		
	TP	38.1	41.7		
	Total	81.9	81.0		

No significant social class difference was found in *R to Ch collaboration* and *Activate*. But the situational difference was markable in both groups. In total, mothers produced more activating utterances in toyplaying than in bookreading situation. At subcategorical level, general activation showed significant situational difference. For *Provide knowledge and teach*, the LC mothers showed higher proportions, though the difference was not significant. In total, mothers from both social groups produced more knowledge providing, teaching utterances in bookreading situation than in toyplaying situation. In *Teach words*, the LC mothers showed a significantly higher scores than the HC mothers. The HC mothers also produced less teaching words utterances in toyplaying situation. [1] In *Elicit knowledge*, no significant social class

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[1]This unpredicted result will be explained in the next discussion part.

difference was observed. But significant situational difference was observed in both groups. Mothers tended to elicit knowledge on the child's part more often in bookreading situation.

On the whole, the HC mothers produced a higher proportion of responsive speech. But the difference was significant in bookreading situation and when the two situations were studied together; but not in toyplaying situation.

Hvothesis VI: HC mothers will make more turnabout than LC mothers.

Hypothesis VII: LC mothers will produce more mand than HC mothers.

Hypothesis VIII: HC mothers will produce more response than LC mothers.

Table 10: The Mean Percentages of 5 Types of Turns of the HC and LC Mothers in Bookreading and Toyplaying Situations

		Group		*t*-value	
Turn	Situation	HC	LC	HC-LC	BR-TP
R	BR	27.9	21.2	2.86**	
	TP	22.6	15.6	2.50*	2.4*(LC)
	Total	50.5	36.8	3.60**	
R-	BR	8.5	10.9		
	TP	9.8	11.5		
	Total	18.3	22.4		
M	BR	22.8	28.8		
	TP	21.6	26.5		
	Total	44.4	55.3		
RM	BR	25.7	17.6	2.68*	
	TP	27.2	24		-2.86*(LC)
	Total	52.9	42.6		
RM-	BR	.8	2.1	-2.49*	
	TP	1.4	2.2		
	Total	2.2	4.3	-2.42*	
R+RM	BR	53.6	38.8	3.47**	
	TP	49.8	39.6	2.32*	
	Total	103.4	79.4	3.48**	

For turnabout(RM), a significant increment for the HC mothers occurred in bookreading situation, but not in toyplaying situation and when the two situations were studied together. Also, it was observed that the LC mothers produced less RM in bookreading situation. Hypothesis VI was partly supported. An examination of RM- revealed that the LC mothers made more simple turnabouts consisting of "Ah?" than the HC mothers. The observation was significant in bookreading situation and when the bookreading and toyplaying situations were combined.

For mand(M), the prediction was not confirmed. No significant social class differences were observed in both two situations and the combined situation, although the LC mothers showed slightly higher proportions across all the situations. Hypothesis VII was not supported. For response(R), the prediction turned out perfectly correct. Regardless the situational conditions, the HC mothers produced significantly more responses than LC mothers. The LC mothers showed situational difference; they produced less R in toyplaying situations. In addition, the data of Response plus RM suggested a even stronger evidence that the HC mothers were more responsive. Regardless the situational conditions, the HC mothers produced significantly more R and RM than the LC mothers. Hypothesis VIII was satisfactorily confirmed.

Although it was not significant, the LC mothers produced more R- than the HC mothers. It implied that the LC mothers' responses simply consisted of "Yeah" or "Yes".

V. DISCUSSION

A. General Discussion of Results

Most of the results were fairly consistent with the previous studies. The majority of the hypotheses were confirmed in accordance with the predicted direction. It was demonstrated that claims about social class differences in mother's speech, which were mostly drawn from Western context, were also applicable to the Korean setting, suggesting that social class is probably a better indicator of mother's socializing practice than culture.

The HC mothers' speech consisted of greater proportions of semantically related speech (Hypothesis I(1),(2),(3): Table 4). They were more likely to pick up the child's preceding utterances and to present them in the form of extension or expansion. When they repeated their own utterances, the repetition became a synergistic extension or expansion of the preceding maternal utterance. These findings accorded with those of Dunn et al.(1977) and Snow et al.(1976).

The results of the test hypotheses IV(1),(2)(Table 7) demonstrated that the HC mothers' speech functioned to speak on behalf of the child's ego which was yet to be differentiated. Most significant social class differences were found in *Explicate* and *Elaborate* subcategories. The results were consistent with Schachter's observation with American disadvantaged and advantaged groups of mother-child pairs. The HC mothers were more likely to explicate and elaborate the child's learning implementing utterances and the child's report. But unlike Schachter's work, no significant difference was found in *R to Ch desire*. Even none of the subcategories exceeded 1% of frequency. A plausible explanation can be found in the present research contexts. In Schachter's works, the data were collected in a more or less free and natural environment, such as free play situation or home routine interaction. But the interactions concerned in the present study occurred in a limited space with given materials. Such contextual confinements were believed to narrow down the child's behavioural and linguistic repertoire, and resulted in the less frequent expression of desire.

Significant increment for the HC mothers in *Report* categories suggested that the HC mothers were more eager to explain the child's behaviour as well as his environment, so that the child could see himself as a differentiated acting agent from the world. In particular, the significant difference in *Inducing report* on things implied that the HC mothers encouraged and induced the child to make reports on the environment more often than the LC mothers. On the whole, the HC mothers produced significantly higher proportions of responsive talk. Putting the findings in adualistic interpretation, it can be stated that the HC mothers' speech tends to accelerate the child's self-differentiation process and facilitates language growth.

Although the subcategories had less than 1% of frequency, in the total number of *Restrict-command*, the LC mothers showed a significantly higher proportion than the HC mothers. The LC mothers' frequent use of command and restrictions has been one of the most unique aspect of LC mothers' behaviour. Korean LC mothers were also more likely to restrict and reproach the child's behaviour as well as to issue more commands than the HC mothers.

The results related hypotheses VI, VII and VIII (Table 10) demonstrated that the HC mothers were more likely to continue their conversational topic. Many researchers have been in fact concerned with SES differences in mothers in maintaining conversational turns. What has been predicted was that HC mothers would be more likely to take up the child's communication and continue the conversation with the topic that the child has introduced. The findings drawn from testing hypotheses VI, VII, VIII provided a compelling evidence confirming the prediction. The HC mothers showed higher proportions of response and turnabout. Also, when the RM scores were combined with R, the HC mothers acquired notably higher score. It was implied that the HC mothers were far more likely to continue their conversational chain by adjusting their speech to the child's preceding communication and eliciting a further response from the child. In sum, the HC mothers' communicative interaction bore most of the facilitative features of the child's language mode. They provided the most efficient and salient linguistic input which could be easily understood and captured by the child's attention. They also encouraged the child to involve in a conversational turn and all this effort was based on the

child's prior communication. Their interaction was characterized by "listening-to-the-child" and "proceeding-to-new information". Seemingly, the HC mothers carried the most effective linguistic environment which was characterized by responsive communication.

Categories in which significant SES differences were found are listed in Table 11.

Table 11: Categories of significant social class differences

Categories	Situation	Group[1]	*t*-value
Semantically related utterances(total)	BR	HC	3.78***
	TP	HC	5.01***
	Total	HC	5.85***
Incomplete expansion	BR	HC	2.18*
	TP	HC	3.01***
	Total	HC	3.78***
Elaborate expansion	TP	HC	3.80***
	Total	HC	4.55***
Noun-phrase extension	TP	HC	3.37**
	Total	HC	2.71*
Synergistic sequence	BR	HC	4.36***
	TP	HC	2.43*
	Total	HC	4.05***
Transformed imitation	BR	HC	3.15**
	Total	HC	2.43*
R to Ch learning	TP	HC	2.89**
Explicate	Total	HC	3.15**
R to Ch report(total)	BR	HC	3.72**
Explicate	BR	HC	2.69*
	TP	HC	2.40*
	Total	HC	3.58**
Elaborate	BR	HC	2.51*
	Total	HC	2.51*
Report to Ch(total)	BR	HC	2.53*
Specific interrogative	BR	HC	2.23*
Report or self,other	BR	HC	2.34*
on things(total)	TP	HC	2.51*
	Total	HC	3.28**
Inducing report	TP	HC	3.76***
	Total	HC	2.73*
Restrict-command	TP	LC	-3.48**
	Total	LC	-3.09**
Provide knowledge &teach	TP	LC	-3.55**
Teach words	Total	LC	-2.33*
Total response score	BR	HC	2.74*
	Total	HC	2.27*
R	BR	HC	2.86**
	TP	HC	2.50*
	Total	HC	3.60**
RM	BR	HC	2.68*
RM-	BR	LC	-2.49*

	Total	LC	-2.42*
R+RM	BR	HC	3.47**
	TP	HC	2.32*
	Total	HC	3.48**

1 The group which had the higher proportion.

In fact, one of the long held behavioural characteristics distinguishing the two social groups has been involved in the LC mothers' inert, inactive, or passive interactional attitude. LC mothers were described to have a remaining-out-of contact attitude (Zunich, 1961) and less likely to take up a given chance to continue the interaction with the child (Wootton, 1974). They were reported to spend less time in interacting with the child (Dunn et al., 1977). Unless they were pressed by situational factors, LC mothers were less likely to produce qualitative linguistic input (Dunn et al., 1977; Snow et al., 1976). These findings have built up an inact image of LC mothers. But the findings drawn from the present study don't seem to agree with the past discussions.

In Table 9, it was noted that, in *Activate* and *Provide knowledge and teach*, the LC mothers apparently exceeded the HC mothers. They demonstrated a slightly higher increment in both categories than the HC mothers, though the differences proved non-significant. In the total spontaneous score, with some inconsistency of the data over the two contexts, the two groups hardly showed any difference.

What is implicit in these findings is that the Korean LC mothers are not inactive. It is apparent that they activated the child as much as the HC mothers did; they were equally eager and enthusiastic to provide knowledge and to teach the child words. Of course, there existed qualitative differences in those endeavors. As noted, the LC mothers exceeded the HC mothers in the mean frequency of *Teach words* and *Elicit knowledge*. By definition, Teach words counted utterances which were single words referring to things, such as "Apple", or "Elephant", which were not usually accompanied with any additional explanation. Elicit knowledge, in contrast to Inducing report subcategory, of which question was constructed in such a way the the child had to describe or make a report on things in a specific way, consisted

of single question format like "What is this?". Presumably, the child's following utterance would take an answering tone, which simply expresses "what" it is. Thus, what the LC mothers provided and the way they presented the linguistic input were coarse, less elaborated and less complicated. But the LC mothers' apparently higher score on those categories suggested that they made at least the equally frequent attempts to teach the child and elicit certain responses from the child.

The LC mothers' higher score on mand is another evidence that the Korean LC mothers were not inert in initiating a conversational interaction. The data revealed that the LC mothers made more attempts to put the child to a next conversational turn. Again, qualitative differences between the two groups in maintaining a conversational chain were obvious. As shown in Table 10, the LC mothers' responses were more likely to be composed of simple answers like "Yes" or "Yeah" (i.e., R-). Their RM was significantly more often consisted of simple affirming question "Ah?"(i.e.,RM-). They produced less elaborated and complicated response and mand. Nevertheless, the LC mothers' higher score on M cast an important implication that the LC mothers made efforts to provoke responses on the child's part as much as the HC mothers did. Obviously, the findings stress that the LC mothers are not inert or passive as assumed in previous studies.

Even the difference of vulnerability of the mother's speech to contextual influence was not decisive. The impact of contextual condition on the two social groups was inconsistent. In total, there were 21 categories in which significant social class differences were found (Table 11). Out of 21 categories, 7 categories--semantically related speech(total), incomplete expansion, synergistic sequence, R to Ch report(explicate), Report on self, others, and things(total), response turn, and R+RM--showed social class differences in both bookreading and toyplaying situations as well as in the combined situation. 6 categories- Elaborate expansion, Noun-phrase extension, R to Ch learning(explicate), and Inducing report, Restrict-command, and Provide knowledge and Teach words--found significant social class differences in toyplaying situation and in the combined situation score. 4

categories--Transformed imitation, R to Ch report(elaborate), total responsive score and RM--demonstrated that significant differences existed in bookreading situation and in the combined situation score. 4 categories--Report to Ch (total, & specific interrogative), R to Ch report (total), RM--observed significant differences in bookreading situation only. These results seem inconsistent with Snow et al.'s (1976) research in which significant SES differences were observed in free play situation only.

Comparisons of mother's speech over the two situations in each social group showed that the HC mothers were equally affected by situational factors as the LC mothers. The HC mothers showed significant situational differences over 10 categories, whereas the LC mothers significantly varied their speech over the two situations in 15 categories. Both groups of mothers were equally influenced by the situational factors.

Seemingly, the present data do not support the argument that SES differences in mother's behaviour lie in the interactional activeness. Korean mothers, regardless of their social status, tended to show considerably large amount of enthusiasm to teach and educate the child. A plausible explanation for this observation can be found in the Korean society. In Korea, education is one of the most important factors that trigger the individual's social life. Depending on the educational level that an individual completes, his/her social, or economic position is determined to a certain degree. Educational level determines the range of occupations available to an individual. Occupation in turn determines the individual's social, and especially economic standard. At psychological level, an individual who fails to get high education feels inferior and often sees himself/herself as a failure of the society. Also, culturally, Korean society, partly due to the Confucius influence, respects learned, highly educated people. This social and cultural background is obviously reflected in parent's, especially mother's behaviour. Korean mothers are extremely eager to get their children better and higher education. They are willing to do anything and everything to support the child's education. This effort was obvious at the higher level of education, say, university level. But due to the recent emphasis on the child's early education, the enthusiasm has spread to the

childhood, even to the toddlerhood. Thus, mothers are eager to teach and instigate the child as much as possible. They try to provide better educational environment. For example, they provide better and more toys or books. Presumably, the provision of such materials will be restricted by the parent's economic condition. But the important thing is that mothers are, at least, aware of the necessity of such environmental assistance. This awareness which is basically derived from the social and cultural conditions is supposed to reflect in the Korean LC mothers and result in the active LC mothers. As the results showed, of course, there was difference between the HC and LC mothers in the manner of manifesting this awareness. Obviously, the LC mothers were blunt, whereas the HC mothers were more elaborated and sensitive in fulfilling their responsiblity as a caretaker. But the LC mothers' high proportions of instigating, or teaching utterance (e.g., *Activate, Provide knowlege & teach, spontaneous talk, Mand*) imply that they also endeavor to teach and instigate the children as much as possible.

Besides the Korean LC mothers' unexpected activeness, the mothers from different social groups in Korea shared the same speech characteristics with those of each social group in Western society. Review of the presen: literature revealed that HC mothers tended to show higher proportions in the responsive talk, such as semantically related speech, elaborating or explicating responsive speech, or turnabout conversational turn, than LC mothers. The same observation occurred with Korean mothers. Implicit in this finding is regardless the cultural background, responsiveness is the the basic concept underlying the social class differences of mother's speech and that the speech differences between the two social groups can be best understood and described in terms of mother's responsiveness. For one thing, it is important to understand the SES differences in mother's speech in terms of such a more or less global concept. When the speech style of each social class is described in terms of specific speech features, the implication of the discussion is just confined to the particular linguistic aspects. And depending on the speech features that a researcher has chosen to compare the mother's speech of each calss, the differences between the two groups may be discussed with different tones. This may have caused the disintegrated impressions of the previous discussions of SES

differences in mother's speech. Thus, in the present study, it is concluded that the SES differences in mother's speech basically involve in the mother's responsive attitude; the HC mothers are more likely to produce contingent speech on the child's prior communication or behaviour.

In sum, the following conclusions can be drawn. Firstly, consistent with the findings of Western studies, mothers from different social groups in Korea showed significant social class differences in responsive speech features. But Korean LC mothers were active and enthusiastic in interacting with their children. This difference was attributed to the different social, cultural background of Korean mothers. Secondly, in light of the theoretical propositions about child's language development, it can be argued that the HC mothers provided a far better linguistic environment for the child's language development than the LC mothers. The HC mothers were more likely to provide contingent linguistic input to the child's prior utterance, to accelerate the ego development and to maintain contingent conversational turns. Thirdly, the basic concept which was underlying the SES differences in Korean mothers' speech involved with the mother's responsiveness. The fundamental difference underlying the difference speech style of each social class lay in the mother's responsive attitude.

B. Educational Implications

Studies which investigated the SES differences in mother's speech are bound to suggest some practical implications about what to teach the LC mothers. The present literature of motherese is full of such information. Various features of maternal speech have been suggested to be implemented by LC mothers to improve the linguistic environment of LC children. A problem with this information is that they often involve teaching the LC mothers specific language skill. For instance, in a recent study done by Lee(1985), which compared verbal characteristics of the HC and LC mothers in Korea, it was argued that LC mothers should be trained in the proper use of language and specific ways of interacting with the child. Most of the intervention programs which have been developed and practically implemented in the field

aim at the same goals.

But the present study observed the pronounced SES differences lay in responsiveness and implicitly argued that what is more important than teaching specific linguistic or interactional skills was altering the mother's basic interactional attitude. In fact, specific linguistic features are reflections of mother's underlying attitude about the interaction with the child; they are nothing more than a vehicle of the mother's natural flow of communication. Mothers are rarely aware of their specific linguistic techniques they are using. While they are engaged in an interaction with the child, they naturally and spontaneously adjust their speech without being fully aware of what they are doing.

Thus, change can't be imposed from outside by teaching the mothers specific techniques. If some form of education is necessary, it has to be involved in training mothers to adopt a responsive interactional orientation toward the child. In other words, they have to learn to become responsive rather than to polish their communicative skill.

Unlike specific techniques or skills, however, mother's underlying attitude can not be changed through institutional education. It is not something to learn from how-to books. It is a part of becoming the mother of a child, which is an ongoing process. Stern (1980) noted that,

> From working with caregivers, mostly first-time mothers, I have seen how most of them really "learn their trade". It is not through any of the medical, paramedical, or educational institution. If a woman does not live in an extended family, and most no longer do, she learns through informal groupings of caregivers. These small and transient yet powerful and abiquitous floating "institutions" are the vitally important disseminators of information. ...It is in these loosely structured, informal social groupings that much of the real education and heeded emotional support for the "job" occurs, not in our recognized institutions and not through how to books.(Stern, 1980;p132)

Given that it is important to change the mother's basic conception about interaction with the child and that this change can only be taken place when the mother gets the "feel" of the responsive interactive process, future intervention program should be designed in such a way that LC mothers are somehow given chances to be exposed to a responsive mode. They may be immersed in the responsive interactional context. The immersion program for LC mothers may provide a conceptual paradigm for future intervention program. At this point,

such a program is highly hypothetical. But all the implications drawn from the results of the study suggest that only such kind of an attempt will promise a more successful project.

C. Suggestions for Future Studies

One of the important implications of the present study is that mother's speech is not probably a problem of linguistics. It is linked with social and cultural background. Thus, a complete study of motherese would include various ethnographic information which is assumed to govern the mother's behaviour. For example, in Korea, from the toddlerhood, children are encouraged to learn deferential speech to elderly people. Implementing the polite form of speech is one of the most immediate concerns of Korean mothers who have a child learning language. So, when mothers see their children using impolite form of speech, they would immediately correct them. In fact, many theorists (Brown et al., 1964; Schachter et al., 1976) note that mothers are not concerned about the grammaticality of the child's speech. Rather, they are concerned about the fact of the child's behaviour. What is implied is that depending on what the mother thinks most important with regard to the child's behaviour, mother's speech would vary to a large extent. In turn, it is implied that depending on what the society expects on the child, which implicitly shapes and determines the mother's expectation on her child, mother's speech would also vary. Thus, it is proposed that future studies of motherese consider other variables rather than linguistic varibles, such as mother's child rearing practices, value system, and social and cultural background, which are believed to govern the mother's behaviour and scrutinize how these variables affect mother's daily speech to child, and what kind of effect of the mother's speech brings to the child's development.

The other striking concepts emerged from the present study is mother's responsiveness. In fact, mother's responsive attitude has gained wide recognition in one form or another. It has been proposed as the most phenomenal concept that can capture the wide range of repertoires of mother's social interaction with child (Stern, 1980). Parents often find themselves advised to responsively communicate with their children. The present study also demonstrated that the

SES differences in mother's speech could be best described in light of responsiveness. Furthermore, it was noted that most of the so called "facilitative aspects of mother's speech" basically reflects that mother's responsive interactional attitude.

Seemingly, responsiveness may be the key aspect of mother's behaviour which triggers the child's development in various ways. But the comprehensive effect of the mother's responsiveness on the child's development is yet to be understood. In particular, the mother's responsive talk on the child's language acquisition is far from understanding through which responsive talk exercises the influence on the child's acquisition of language. Since past studies have conceived of the mother's speech in terms of specific, peripheral speech features, the implications of the results were just limited to the particular speech samples selected, and the effect of the underlying concept which encompasses all the superficial speech aspects has gone unnoticed. On the whole, research has been less geared to the interactional, social domain of child's language development. The effect of the child's communicative experience with adult has largely gone unnoticed. Therefore, it was suggested that future studies of motherese be concerned with the mother's contingent communicative attitude rather than with individual speech features and capture the effect of motherese from a more global perspective.

Bibliography

Bain, B.C. (Ed.). (1983). The sociogenesis of language and human conduct. New York: Plenum Press.

Baratz, J.C. (1969). A bi-dialectal task for determining language proficiency in economically disadvantaged negro children. Child Development, 40(2), 889-901.

Barnes, S., Gut-Freund, M., Satterly, D., & Wells, G. (1983). Characteristics of adult speech which predict children's language development. Journal of Child Language, 10(1), 65-84.

Bateson, M.C. (1975). Mother-infant exchange: The epigenesis of conversational interaction. Developmental Psycholinguistics, 263, 101-113.

Bee, H.L., Lawrence, F., Van-Egeren, C., Streissguth, A.P., Nyman, B.A., & Reckie, M.S. (1969). Social class differences in maternal teaching strategies and speech patterns. Developmental Psychology, 1, 726-734.

Bereiter, C., & Engelmann, S. (1966). Teaching disadvantaged children in preschool. Englewood Cliffs, N.J.: Prentice-Hall.

Bernstein, B.A.(Eds.).(1961). Social class and linguistic development: A theory of social learning. In A.H. Halsey, J. Floud, & C.A. Anderson, Economy, education, and society. New York: Free Press.

Bernstein, B.A. (1970). A sociolinguistic approach to socialization: With some reference to educability. In F. Williams (Ed.), Language and poverty: Perspectives on a theme. Chicago: Markham.

Bernstein, B.A., & Henderson, D. (1973). Social class differences in the relevance of language to socialization. In B.A. Bernstein (Ed.), Class, codes and control. London: Routledge & Kegan Paul.

Bever, T.G. (1970). The cognitive basis for linguistic structures. In J.R. Hayes (Ed)., Cognition and the development of language. New York: Wiley.

Blank, M. (1974). Cognitive functions of language in the preschool years. Developmental Psychology, 10, 229-245.

Bloom, L. (1975). Language development review. In F.D. Horowitz et al. (Eds.), Review of

child development research(Vol. 4). Chicago: University of Chicago Press.

Brainerd, C.J. (1978). Piaget's theory of intelligence. Englewood Cliffs, N.J.: Prentice-Hall.

Brandis, W., & Henderson, D. (1970). Social class language and communication. London: Routledge & Kegan Paul.

Broen, P. (1972). The verbal environment of the language-learning child. American Speech and Hearing Association Monographs, 17, 1-65.

Brophy, J.E. (1970). Mothers are teachers of their own preschool children: The influence of socio-economic status and task structure on teaching specificity. Child Development, 41, 79-94.

Brown, I. Jr. (1976). Role of referent concreteness in the acquisition of passive sentence comprehension through abstract modeling. Journal of Experimental Child Psychology, 22, 185-199.

Brown, R. (1970). Stage II. Grammatical morphemes and the modulation of meaning. Mineo: Harvard University.

Brown, R. (1973). A first language: The early stages. Cambridge: Harvard University Press.

Brown, R., & Bellugi, U. (1964). Three processes in the child's acquisition of syntax. Harvard Educational Review , 34, 133-151.

Bruner, J. (1975a). From communication to language: A psychological perspective. Cognition, 3, 255-287.

Bruner, J. (1975b). The ontogenesis of speech acts. Journal of Child Language, 2, 1-10.

Bruner, J.S., Olver, R.R., & Greenfield, P.M. (1966). Studies in cognitive growth. New York: Wiley.

Cazden, C.B. (1965). Environmental assistance to the child's acquisition of grammar. Unpublished doctorial dissertation, Harvard University.

Cazden, C.B. (1970). The situation: A neglected source of social class differences in language use. Journal of Social Issues, 26(2), 35-60.

Chomsky, N. (1965). Aspects of the theory of syntax. Cambridge, Massachusetts: MIT Press.

Clark, H.H., & Clark, E.V. (1977). Psychology and language: An introduction to psycholinguistics. New York: Harcourt Brace Jovanovich.

Cook-Gumperz, J. (1973). Social control and socialization: A study of class differences in the language of maternal control. London: Routledge & Kegan Paul.

Corrigan, R. (1980). Use of repetition to facilitate spontaneous language acquisition. Journal of Psycholinguistic Research, 9(3), 231-241.

Corte, M.D., Benedict, H., & Klein, D. (1983). The relationship of pragmatic dimensions of mother's speech to the referential-expressive distinction. Journal of Child Language, 10, 35-43.

Cromer, R.F. (1968). The development of temporal reference during the acquisition of language. Unpublished doctorial dissertation, Harvard University.

Cross, T.G. (1970).Some investigations into the nature of linguistic environments of twelve two-year-old children. Unpublished manuscript, University of Melbourne.

Cross, T.G. (1975). Some relationships between motherese and linguistic level in accelerated children. Papers & Reports on Child Language Development, 10, 117-135. Stanford University

Cross, T.G. (1976). Mothers' speech and its association with rate of linguistic development in young children. In Waterson, N., Snow, C.E.(Eds.), The development of communication: Social and pragmatic factors in language acquisition. New York: Wiley.

Cross, T.G. (1977). Mothers' speech: Role of child listener variables. In C.E. Snow & C.A. Ferguson (Eds.), Talking to children. Cambridge: Cambridge University Press.

Cross, T.G. (1978). Mothers' speech and its association with rate of linguistic development in young children. In N. Waterson & C.E. Snow (Eds.), The devlopment of communication : Social and pragmatic factors in language acquisition. New York: Wiley.

Deutsch, C.P. (1973). Social class and child development. In B.M. Caldwell & H.N. Ricciuti (Eds.), Review of child development research(Vol. 3). Chicago: The University of Chicago Press.

Dingwall, W.O. (Ed.).(1978). A survey of linguistic science. Stanford, Connecticut: Greylock.

Dittmar, N. (1976). Sociolinguistics: A critical survey of theory and application. London: Edward Arnold.

Dunn, J., Wooding, C., & Hermann, J. (1977). Mother's speech to young children: Variation in context. Developmental Medicine and Child Neurology, 19(5), 629-638.

Elkind, D. (1980). Jean Piaget: Six psychological studies. Brington: The Harvester Press.

Ervin-Trip, S. (1978). Some features of early child-adult dialogues. Language in society, 7(3), 357-373.

Fischer, J.L. (1964). Words for self and others in some Japanese families. American Anthropologists, 66, 115-26.

Frase, C., & Roberts, N. (1975). Mother's speech to children of four different ages. Journal of Psycholinguistic Research, 4(1), 9-16.

Furrow, D., Nelson, K., & Benedict, H. (1979). Mothers' speech to children and syntactic development: Some simple relationship. Journal of Child Language, 6(3), 423-442.

Giglioli, P.P.(Eds.).(1973). Language and social context. London: Penguin Education.

Gleitman, L.R., Newport, E.L., & Gleitman, H. (1984). The current status of the motherese hypothesis. Journal of Child Language, 2, 43-79.

Godinovich, N., & Evans, P. (1982). Children's early language: Egocentric or sociocentric? Alberta Journal of Educational Research, 28(3), 193-203.

Greenfield, P.M., & Smith, J.H. (1976). The structure of communication in early language development. New York: Academic Press.

Halliday, M.A.K. (1975). Learning to mean: Explorations in the development of language. London: Edward Arnold.

Halpern, E., Corrigan, R., & Aviezer, O. (1983). In, on, and under: Examining the relationship between cognitive and language skills. International Journal of Behavioural Development, 6(2), 153-166.

Harris, A.E. (1975). Social dialectics and language: Mother and child construct the discourse. Human Development, 18, 80-96.

Henderson, D. (1973). Contextual specificity, discretion and cognitive socialization: With special reference to language. In B.A. Bernstein (Ed.), Class, codes and control. London: Routledge & Kegan Paul.

Hess, R.D. (1970). Social class and ethnic influences on socialization. In P.H. Mussen (Ed.), Carmichael's manual of child psychology(Vol. 2). New York: Wiley.

Hess, R., & Shipman, V. (1965). Early experience and the socialization of cognitive modes in children. Child Development, 36, 869-886.

Hess, R.D., & Shipman, V. (1967). Cognitive elements in maternal behaviour. In J.P. Hill (Ed.), Minnesota symposia on child psychology(Vol.1). Minneapolis: University of Minnesota Press.

Hong, D.S. et al. (1982). A study of economic development in Korea. Korean Social Science Association.

Howe, C.J. (1983). The conversational factor in language acquisition. Early Child Development and Care, 11(1), 55-67.

Ingram, D. (1978). Language development during the sensorimotor period. In N. Waterson & C. Snow (Eds.), The development of communication. London: Wiley.

Jay, S.M., Routh, D.K., & Brantley, J.C. (1980). Social class differences in children's comprehension of adult language. Journal of Psycholinguistic Research, 9(3), 205-217.

Kamii, C.K., & Radin, N.L. (1967). Class differences in the socialization practices of negro mothers. Journal of Marriage and the Family, 29, 302-310.

Kaye, K., & Charney, R. (1980). How mothers maintain dialogue with two-year-olds. In D. Olson (Ed.), The social foundations of language and thought: Essays in honor of Jerome S. Bruner. New York: W.W. Norton.

Kaye, K., & Charney, R. (1981). Conversational asymmetry between mothers and children. Journal of Child Language, 8(1), 35-49.

Kim, M.S. (1983). Korean grammar system. Seoul, Korea: Il-Jo-Kak.

Kohn, M.L. (1959). Social class and parental values. Journal of Sociology, 64, 337-351.

Kohn, M.L. (1963). Social class and parent-child relationships: An interpretation. American

Journal of Sociology, 68, 471-480.

Kuczaj, S.A. (1982). Old and new forms, old & new meanings: The form-function hypotheses revisited. First Language, 3(7), 55-61.

Lawton, D. (1968). Social class, language and education. London: Routledge & Kegan Paul.

Lee, H.Y. (1985). A study of verbal interaction between mother and child: SES variable. Master thesis, Chung-Ang University, Seoul, Korea.

Lock, A. (Ed.). (1978). Action, gesture and symbol: The emergence of language. London: Academic Press.

Longhurst, T.M., & Stepanich, L. (1975). Mothers' speech addressed to one-; two-, and three-year-old normal children. Child Study Journal, 5(1), 3-11.

MacDonald, L., & Pien, D. (1982). Mother conversational behaviour as a function of interactional intent. Journal of Child Language, 9, 337-358.

Macnamara, J. (1972). Cognitive bases of language learning in infants. Psychological Review, 79, 1-13.

McCartney, K. (1984). Effects of quality of day care environment on children's language development. Developmental Psychology, 20(2), 244-260.

Mead, G.H. (1934). Mind, self, and society. Chicago: University of Chicago Press.

Moore, M.K., Borton, R., & Darby, B.L. (1978). Visual tracking in young infants: Evidence for object identity or object permanence? Journal of Experimental Child Development, 25, 183-198.

Moore, M.K., & Meltzoff, A.N. (1978). Object permanence, imitation, and language development in infance: Toward a neo-Piagetian perspective on communicative & cognitive development. In F.D. Manifie & L.L. Lloyd (Eds.), Communicative & cognitive abilities-early behavioural assessment. Baltimore: University Park Press.

Nelson, K.E. (1973). Structure and strategy in learning to talk. Monographs of the Society for Research in Child Development, 38(Serial No. 149).

Nelson, K.E. (1980). Theories of the child's acquisition of syntax: A look at rare events and at necessary, catalytic, and irrelevant components of mother-child conversation. Annals of

the New York Academy of Sciences, 345, 45-67.

Nelson, K.E., Carskaddon, G., & Bonvillian, J.P. (1973). Syntax acquisition: Impact of experimental variation in adult verbal interaction with the child. Child Development, 44, 497-504.

Newport, E.L. (1977). Motherese: The speech of mothers to young children. In N.J. Castellan, D.B. Pisoni, & G.R. Potts (Eds.), Cognitive theory(Vol. 2). Hillsdale, N.J.: Erlbaum.

Newport, E., Glietman, L., & Gleitman, H. (1975). A study of mothers' speech and child language acquisition. Papers & Reports on Child Language Development, No. 10. Stanform University, Stanford, California.

Newport, E.L., Glietman, H., & Glietman, L.R. (1977). Mother, I'd rather do it myself: Some effects and non-effects of maternal speech style. In C. Ferguson & C. Snow (Eds.), Talking to children. Cambridge: Cambridge University Press.

Ninio, A. (1980). Picture book reading in mother-infant dyads belonging to two-subgroups in Israel. Child Development, 51, 587-590.

Ninio, A., & Bruner, J. (1978). The achievement and antecedents of labelling. Journal of Child Language, 5, 1-15.

Olim, E.G. (1970). Maternal language styles & cognitive development. In F. Williams (Ed.), Language and poverty. Chicago: Markham.

Olim, E.G., Hess, R.D., & Shipman, V.C. (1967). Role of mothers' language styles in mediating their preschool children's cognitive development. School Review, 75, 414-424.

Olson, D.R. (Ed.).(1980). The social foundations of language and thought: Essays in honor of Jerome S. Bruner . New York: W.W. Norton.

Phillips, J.R. (1973). Syntax and vocabulary of mother's speech to young children: Age and sex comparison. Child Development, 44, 182-185.

Piaget, J. (1952). The origin of intelligence in children. New York: International Universities Press.

Piaget, J. (1962). The language and thought of the child. London: Kegan Paul.

Piaget, J. (1970). Piaget's theory. In P.H. Mussen (Ed.). Carmichael's manual of child psychology(Vol. 1). New York: John Wiley.

Piaget, J., & Inhelder, B. (1969). The psychology of the child. London: Routledge & Kegan Paul.

Ratner, N., & Bruner, J. (1978). Games, social exchange and the acquisition of language. Journal of Child Language, 5, 391-401.

Ringer, N.M. (1981). The development of language and how adults talk to children. Infant Mental Health Journal, 2(2), 71-83.

Ringer, N.M. (1983). From prespeech to language: The influence of caregiver-child interaction. Infant Mental Health Journal, 4(1), 43-50.

Schachter, F.F. (1979). Everyday mother talks to toddlers: Early intervention. New York: Academic Press.

Schachter, F.F., Fosha, D., Stemp, S., Brotman, H., & Ganger, S. (1976). Everyday caretaker talks to toddlers vs. threes and fours. Journal of Child Language, 3, 221-246.

Schachter, F.F., Kirshner, K., Klips, B., Friedricks, M., & Sunder, K. (1974). Every preschool interpersonal speech usage: Methodological, developmental, and sociolinguistic studies. Monographs of the Society for Research in Child Development , 39(4, Serial No. 156).

Schachter, F.F., Marquis, R., Bundy, C., & McNair, J. (1977). Everyday speech acts of disadvantaged and advantaged mothers to their toddlers. Paper presented at the biennial meeting of the Society for Search in Child Development. New Orleans, Louisiana.

Schachter, F.F., & Strage, A.A. (1982). Adults talk and children's language development. In S.G. Moore & C.R. Cooper (Eds.), The young child: Review of research (Vol. 3). Washington, D.C.: National Association for the Education of Young Children.

Schaffer, R. (1980). Mothering. Cambridge, Massachusetts: Harvard University Press.

Schlesinger, I.M. (1982). Steps to language: Toward a theory of native language acquisition. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Searle, J.R. (1970). Speech acts: An essay in the philosophy of language. London: Cambridge University Press.

Seitz, S., & Stewart, C. (1975). Imitation and expansion: Some developmental aspects of mother-child communications. Developmental Psychology, 11(6), 763-768.

Shatz, M. (1977). Aspects of communicative interaction. Journal of Communication, 27(2), 92-97.

Shugar, G.W. (1978). Text analysis as an approach to the study of early linguistic operations. In N. Waterson & C. Snow (Eds.), The development of communication. Chichester: John Wiley & Sons.

Sinclair-de-Zwart, H. (1969). Developmental psycholinguistics. In D. Elkind & J.H. Flavell (Eds.), Studies in cognitive development: Essays in honor of Jean Piaget. New York: Oxford University Press.

Sinclair-de-Zwart, H. (1970). The transition from sensori-motor behaviour to symbolic activity. Interchange, 1, 119-126.

Sinclair-de-Zwart, H. (1975). The role of cognitive structures in language acquisition. In E.H. Lenneberg & E. Lenneberg (Eds.), Foundations of language: A multidisciplinary approach. New york: Academic Press.

Slobin, D.I. (1973). Cognitive prerequisites for the development of grammar. In C.A. Ferguson & D.I. Slobin (Eds.), Studies of child language development. New York: Holt, Rinehart & Winston.

Slobin, D.I. (1975). On the nature of talk to children. In E.H. Lennerberg & E. Lennerberg (Eds.), Foundations of language development: A multidisciplinary approach(Vol.1). New York: Academic Press.

Slobin, D.I. (1978). Developmental psycholinguistics. In W.O. Dingwall (Ed.), A survey of linguistic science. Stanford, Connecticut: Greylock.

Smith, F., & Miller, G.A. (1968). The genesis of language: A psycholinguistic approach. Cambridge: The MIT Press.

Snow, C. (1972). Mother's speech to children learning language. Child Development, 43, 549-565.

Snow, C.E. (1977). The development of conversation between mothers and babies. Journal of Child Language, 4, 1-22.

Snow, C.E., Arlman-Rupp, A., Hassing, Y., & Jose, J. (1976). Mothers' speech in three social

classes. Journal of Psycholinguistic Research, 5, 1-19.

Snow, C., & Ferguson, C. (Eds.). (1977). Talking to children: Language input and acquisition. London: Cambridge University Press.

Snow, C., & Goldfield, B.A. (1983). Turn the page please: Situational-specific language acquisition. Journal of Child Language, 10, 551-569.

Stern, D. The first relationship: Infant and Mother. Cambridge, Massachusetts: Harvard University Press.

Strohner, H., Weingarten, R., & Becker, B. (1982). Interactional conditions of syntax acquisition: A review. Instructional Sciene, 11(1), 51-69.

Tfouni, L.V., & Klatzky, R. (1983). A discourse analysis of deixis: Pragmatic, cognitive, & semantic factors in the comprehension of 'this', 'that', 'here', and 'there'. Journal of Child Language, 10, 123-133.

Vygotsky, L.S. (1981). The genesis of higher mental functions. In J.V. Wertsch (Ed.), The concept of activity in Soviet psychology. Armank, N.Y.: M.E. Sharpe.

Waterson, N., & Snow, C. (1978). The development of communication. Chichester: John Wiley & Sons.

Wells, G. (1974). Learning to code experience through language. Journal of Child Language, 1, 243-269.

Wells, G. (1975a). Interpersonal communication and the development of language. Paper presented to the third International Child Language Symposium, London.

Wells, G. (1975b). The contexts of children's early language experience. Educational Review, 27, 114-125.

Wells, G. (1981). Adjustments in adult-child conversation: Some effects of interaction. In H. Giles, P. Smith, & W.P. Robinson (Eds.), Language: Social psychological perspectives. Pergamon, Oxford.

Wells, G. (1984). Learning to code experience through language. Journal of Child Language, 1, 243-269.

Werner, H., & Kaplan, B. (1963). Symbol formation. New York: Wiley.

Wertsch, J.V. (1983). Role of semiosis in Vygotsky's theory. In B.Bain (Ed.), The sociogenesis of language and human conduct. New York: Plenum Press.

Williams, F. (Ed.). (1970). Language and poverty. Chicago: Markham.

Williams, F., & Naremore, R.C. (1969). On the functional analysis of social class differences in modes of speech. Speech Monographs, 36(2), 77-102.

Wootton, A.J. (1974). Talk in the homes of young children. Sociology, 8, 277-295.

Yim, H.S. (1983). Social equality and development. Seoul: Jung-Um.

Zunich, M. (1961). A study of relationships between child-rearing attitudes and maternal behavior. Journal of Experimental Education, 30, 231-241.

APPENDIX 1

KOREAN OCCUPATIONAL SES INDEX

Code	Occupation	Index
021	Architect & city planning engineers	62.5
002	Civil engineers	65.6
023	Electrical & electronic engineers	62.7
031	Surveyors	50.3
032	Draftmen	61.1
033	Civil engineering technologists	51.1
035	Mechanical engineering technicians	49.3
04	Aeronautical, ship crews	74.8
042	Ship crews & navigators	62.7
061	Physicians & surgeons	84.1
063	Dentists	78.1
065	Veterinarians	65.7
067	Pharmacists	71.0
077	Herb doctors	55.9
079	Medical lab. technologists & technicians	44.3
082	Nursing assistants	45.4
10	Accountants	75.6
121	Lawyer & public prosecutors	86.9
129	O.R.O.[1] to law	56.5
131	Teaching: University, college	81.9
132	Teaching: Secondary school	70.6
133	Teaching: Elementary school	57.6
139	O.R.O. to teaching	62.3
14	Priests, nuns, & brothers	58.3
159	Writers, editors, & O.R.O.	66.6
161	Sculptor, painters, and other related artists'	49.4
162	Commercial artists & designers	47.1
163	Photographic process occupations	39.3
171	Song-writers, musicians, & singers	52.4
179	O.R.O. to commercial entertainment	63.1
180	Athletes & O.R.O.	45.8
199	Other professional occupation	49.3
20	Legislators & government administrator	64.2
202	Government administrators	63.7
21	General managers	68.6
211	Head managers	69.5
212	Managers: production	69.5
219	Other related managerial occupations	64.1
30	Supervisor: clerical work	68.9
31	Clerical officers: government	50.0
33	Clerical officers: bank & other financial area	49.9
34	O.R.O. to financial work	47.0
36	Traffic controllers	29.0
370	Clerical occupations: posts & mails	37.9
380	Telephone & telegraph equipment operators	45.6
39	Other clerical occupations	48.6
391	Foremen: product	48.3
392	Clerical occupations: purchasing	48.5
393	Clerical occupations: record keeping & handling	48.5

394	Guides & clerical occupations: travel agency	46.1
400	Supervisors: wholesale & retail trade	52.6
410	Wholesale & retail trade	39.9
421	Supervisors: sales	59.4
432	Selling agent	41.3
441	Insurance, realestate, & stock dealers	34.7
442	Salesmen: service	45.3
443	Auctioneer & appraiser	48.7
451	Clerks: sale	34.0
452	Door-to-door salesmen, street vendors, & newsboys	30.9
490	O.R.O. to sales	32.2
500	Foremen: restaurant & hotel	48.5
510	Restaurant & hotel business	39.9
531	Chefs & cooks	30.9
532	Waiters, waitress, & bartenders	28.8
540	Housemen, housemaids, & O.R.O.	31.2
551	Superintendents: building	38.4
552	Janitor & O.R.O.	24.8
560	Laundary & dry cleaning	33.7
570	Hairdressers	26.6
581	Firefighting	45.2
582	Policemen, detectives, & investigators	47.5
589	O.R.O. to security	36.8
599	O.R.O. to other service	3.55
611	Agriculture: general farming	20.8
612	Agriculture: special farming	20.8
621	Farming: general	17.1
622	Farming: field, ricefield, & vegetable	18.0
623	Farming: orchard	20.7
624	Farming: live stock	21.8
626	Farming: poultry	29.3
627	Farming: horiculture & gardening	30.4
631	Lumbermen	11.0
632	O.R.O. to forestry & logging	27.2
641	Fishermen	22.4
649	O.R.O to fishing & hunting	20.1
700	Foremen: production	48.7
711	Miners & quarriers	31.6
712	Mineral ore: processing	32.5
713	Mineral ore: treating	35.3
721	Metal: refining	38.1
722	Metal: pressing	40.1
724	Metal: shaping & forming	38.2
728	Metal: finishing & plating	33.2
731	Wood: processing	34.8
732	Plywood making	22.8
734	Pulp, paper making, & O.R.O.	34.2
745	Petroleum refining	47.7
749	O.R.O. to chemical processing	34.3
751	Textile fibre preparing occupations	40.1
752	Textile spinning & twisting	43.6
754	Textile weaving	33.1
755	Textile winding & reeling	32.6
756	Textile bleaching & dyeing occupations	33.1

759	O.R.O. to textile	33.6
771	Flour milling & O.R.O.	25.6
773	Slaughtering & meat processing	21.7
774	Food preserving	32.9
776	Bakery	33.5
778	Liquor & beverage processing	30.8
779	O.R.O. to food processing	31.3
781	Cigarette making	37.7
782	O.R.O. to cagarette making	43.1
791	Tailors & dressers	37.7
794	Clothes: patterning & cutting	38.1
795	Clothes: stitching & embroiling	32.1
799	O.R.O. to clothes	33.7
801	Shoesmakers & shoesrepairing	34.5
802	Shoesmaking: cutting & assembling	35.3
803	O.R.O. to leather processing	32.8
811	Furniture making	26.2
812	Wood machining	33.6
819	O.R.O. to wood finishing	27.7
820	Stone: cutting	25.6
831	Furnacemen & related occupations	33.2
832	Metal: machining	37.9
833	Machine: operating	42.7
834	Machine: operating	34.8
835	Metal: sanding, refining, & milling	31.5
839	O.R.O. to machinery	33.9
841	Machine assembling	39.1
842	Watch and other precise machine assembling	38.3
843	Automobile maintenance	36.3
849	O.R.O. to machine assembling	36.9
851	Electrical installing	43.9
853	Electronic installing	45.2
853	Electrical & electronic equipment assembling	41.4
854	Radio & TV repairing	39.8
855	Electrical mechanics	41.7
856	Telephone & telegraph installing	42.9
857	Electrical wire & cable lining	36.9
859	O.R.O. to electrical & electronic installing	45.8
862	Sound recording & reproduction equipment operators	44.2
871	Boilers	38.4
872	Welding & flame-cutting	36.7
873	Plating	33.8
874	Structural metal workers	34.6
880	Jewellery processing	37.3
891	Glass: forming, cutting, shaping, & sanding	35.7
892	Glass, stone: forming & sanding	27.8
899	O.R.O. to glass & clay	36.0
901	Rubber & plastic: processing	32.6
902	Tyre making	38.5
910	Papermakers: pulp processing	32.8
921	Printers & engravers	40.8
922	Printing press	38.2
929	O.R.O. to printing	43.7
931	Paving & surfacing	34.7

939	O.R.O. to paving & surfacing	32.1
942	Handcraftmen	21.2
943	Non-metal ore processing	25.0
949	O.R.O. to 943	26.0
951	Brick laying & tiling	25.7
952	Metal concreting & cementing	28.5
953	Roofing	26.7
954	Carpenters	29.2
955	Plasterers	25.1
956	Heating system installing	36.9
959	O.R.O. to construction	24.2
961	Electrical power operators	38.4
962	O.R.O. to 961	37.0
971	Harbor labourers: loading & shipping	25.1
973	Heavy machine operators	41.9
974	O.R.O. to heavy machine	42.7
981	Deck labourers: ferrymen	34.4
982	Engineers: ship	40.0
983	Railway transportation operators	41.5
984	Railway sectionmen & trackmen	43.9
985	Auto drivers	40.4
986	Horse power transportation	23.8
987	O.R.O. to transportation	33.3
999	Other labourers	23.8

1 **O**ther **R**elated **O**ccupation

APPENDIX 2

RECAST TYPE OF COMMUNICATION

A. General Guideline

An utterance was a scoreable unit. Basically, mother's utterance was referred to the most recent utterances of the child's or of the mother's. When the child's most recent utterance consisted simply of filling or responding words like "Ung", "Uh", etc., however, mother's utterance was referred further back to other utterances. When the mother's utterance could be somehow better evaluated in referrence to other utterances rather than to the most recent one, it was done so. For the sake of convenience and intention to observe the main thrust of each category, filling words, single words repeated at the end of a sentence, or the child's name were excluded. But the child's name which performed a grammatical function in a sentence as an object or a subject was taken into consideration.

B. Imitation

Exact Imitation

An exact imitation referred to a mother's utterance which exactly imitated the child's preceding utterance. An imitation with omission or addition of filling or responding words, like "Ung", "Ah", "Uh", or any other exclamatory words was also regarded as an exact imitation. An imitation with correction of pronunciation was also scored as an exact imitation. Mother's utterance which imitated the child's preceding utterance with omission of the child's words repeated at the end of a sentence was also counted as an exact imitation.

Partial Imitation

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[9]Cross's (1976) list of recast type of communication was adopted. But the definitions were reformulated to fit the Korean language structure. And some subcategories were added to or omitted from the original list.

It referred to a mother's utterance which repeated any of the child's preceding utterance by leaving some words out. A partial imitation with a slight change of non-lexical part of the child's original utterance was also included. When partial imitation category conflicted with the other categories of imitation, the following rule was applied: As long as there was more than one lexical item missed, the utterance was straitforwardly regarded as a partial imitation.

Transformed Imitation

It referred to an utterance that repeated the child's sentence in a different sentence type. Mostly, it included imitations with conjugation of verbs or change of noun-suffix.

Paraphrase Imitation

It included an utterance that repeated the child's utterance by altering lexical item. When it conflicted with transformed imitation category, as long as there was any lexical item altered, the utterance was scored as a paraphrase imitation.

C. Semantically Related Speech

Expansion

The main thrust of expansion was concerned with the mother's utterance which took up the child's grammatically incomplete sentence and corrected it into a grammatically complete sentence. Since the distinction between complete sentence and incomplete sentence was not clear (Kim, 1983), however, in the present study, completeness of a sentence was not concerned. Rather, if the child's utterance was reformulated by filling the grammatical items missed, it was first regarded as being expanded.

When the items which were added were non-lexical items, say affixes, the mother's utterance was regarded as an incomplete expansion. When the child's utterance was expanded

with verbs like 'BECOME'(되다) ,'BE'(있다), 'DO'(하다), the mother's utterance was scored as an incomplete expansion. But expansion with affixation of any other verbs rather than those mentioned above was regarded as an elaborate expansion. The reason for the inclusion of the three verbs in incomplete expansion category was that these verbs functioned to just reiterate the meaning of the child's preceding utterance without much elaboration.

An elaborate expansion was concerned with mother's utterance which added lexical items to the child's words or phrases and elaborated the meaning of the child's words more fully. But a confusion with the definition of elaborate expansion was that an addition of lexical items to the child's preceding utterance could result in a semantic extension as well. The only difference lay in the sense or content of the utterance resulted from the addition. If the utterance was still limited to reiterating the meaning that the child had intended to express, it was regarded as an elaborated expansion. If the utterance came to introduce a new topic or new semantic sense to the child's orignal utterance, it was scored as a semantic extension.

Semantic Extension

It represented mother's utterance that picked any part of the child's prior utterance and elaborated or added to the meaning that the child had contributed.

1. Noun-Phrase Extension: It was concerned with an utterance that picked up the child's topic noun phrase and extended its meaning by exactly incorporating the topic phrase. The items picked were not necessarily a noun-phrase as such. Any lexical items except those in predicate were eligible. Extension of the child's pronoun was also included. In that case, as long as the pronoun referred to the same object or event that the child was mentioning, the change of form of the pronoun was ignored. So, 'THIS'(이것),'THAT'(저것), 'IT'(그것), 'HERE'(여기), or 'THERE'(저기), was not specifically discerned. But when the same pronoun referred to a different entity, it was not included.
2. Predicate Extension : It was an extension of any lexical item in predicative part.

D. Maternal Repetition

General Guideline

When mother's utterance had more than two references, the most recent one was taken into consideration. When the mother's utterance did not seem to have any repetitive connection to the most recent one, it was referred further back to the other maternal preceding utterances. Like in the case of imitation category, filling words or responding words were ignored.

Paraphrase Repetition

It referred to a maternal utterance which repeated the mother's preceding utterance by altering the lexical item contained in the original utterance. Yet, it was restricted to reiterating the sense of the preceding utterance. (cf. Paraphrase imitation).

Exact Repetition

It was an exact sequential repetition of any preceding maternal utterances. An exact repetition with a transposition of words was also regarded as an exact repetition. (cf. Exact imitation)

Partial Repetition

Maternal utterance which repeated any word, phrase or a whole sentence of a preceding maternal utterance, but which was not an exact repetition was included. A repetition of the child's name only was not included. (cf.Partial imitation)

Transformed Repetition

It was concerned with a sequential repetition of any preceding maternal utterance that altered the sentence type of the original maternal utterance.(cf. Transformed imitation)

E. Synergistic Sequences:Extensional Repetition

Mother's utterance which expanded or extended any lexical item of the maternal preceding utterance was included. This type of utterances took a similar form of repetition. But semantic sense wise, it was more close to an extension of the maternal preceding utterance.

APPENDIX 3

FIS-C SYSTEM

A. General Guideline

An utterance was a scoreable unit. When two separate utterances could be somehow better understood within a single sentence contour, the two utterances were strung together and scored for one function. Expletive words, filling, or responding words, which hardly carried any topic meaning, were excluded. The exclusion implied that mother's utterance either preceded or followed by such words was treated as if it was not. Also, utterances which were extraneous to the mother's personal or social motives, or ambiguous in meaning were excluded. Request for repetition when the mother had not heard the child's prior verbalization was also ignored.

B. Responsive Speech

General Guideline

Schachter defined responsive talk as talk which occurred in response to the stimulus of the child's verbal or non-verbal communication to C(caretaker). At empirical level, utterances which were following the child's prior utterance to the C were regarded as responsive talk. But in many cases, child's utterance was produced in such a way that it was not spoken particularly to the mother, nor contained any substantial topic for the mother to respond. In such cases, mother's utterance which sequentially followed the child's prior communication was not a responsive or sensitive talk in any sense. Furthermore, mother's utterance sometimes consciously or unconsciously ignored the child's prior utterance and introduced new conversational topic. According to Schachter, such utterance should be considered responsive

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[10] Schachter's FIS-C system was used. But the original definitions were modified to fit the characteristics of Korean speech samples. And some of the subcategories were added to or missed from the Schachter's original work.

talk, simply because it sequentially followed the child's prior talk. This technical definition is very likely to obscure the main thrust of FIS-C system, which puts emphasis on the latent intention behind an utterance. Thus, in the present study, responsive talk was defined as follows.

1. If an utterance was sequentially following the child's utterance or non-verbal action and somehow semantically responsive or sensitive to the content of the child's prior communication, it was regarded as a responsive talk.
2. But when the child's prior utterance consisted of simple responding words like "Ung"(yes), so that it did not carry any meaningful topic for the mother to respond, mother's following utterance was rather regarded as a spontaneous talk.
3. Even when the child's preceding utterance implied a substantial topic meaning, if the mother's utterance was semantically unrelated and seemed to be hardly responsive to the child's preceding utterance, it was scored as a spontaneous talk.

At a gross level, categories were initially selected on the basis of the type of the child's prior communication and the mother's utterance was further subcategorized according to its specific function.

Respond to Ch expressive communication

1. Explicate the emotion more fully than Ch or in different words.
2. Seek elaboration: asking for further information.
3. Confirm the true value of the child's communication.
4. Seek to alleviate negative feelings

Respond to Ch desire implementing communication

1. Explicate
2. Seek elaboration

3. Fulfil the desire with accompanying speech
4. Assist child to fulfil his own desire: by pointing out whereby or how.
5. Disinhibit desire by encouraging child if he seems to need permission or support to pursue his desire.

Respond to child ego-enhancing communication ...Child boasts, displays prowness, or uneasily admits defeat.

1. Ego-boost by affirming child boast
2. Provide justification for ego blow by giving excuses for defeats.

Respond to Collaborative Communication

In this category, mother's utterance was restricted to that produced to maintain a collaborative activity. In other words, mother's utterance which explicated or commented on the child's fantasy role, or which was related to an ongoing play or game, but not an actual collaborative comment, was excluded. This type of utterances was rather scored according to its independent function.

1. Participate in collaborative dramatic play
2. Participate in role-differentiated Ch project or discussion when C speaks while engaged in Ch-initiated cooperative play or discussion.
3. Engage in collaborative chanting when Ch-communication is followed by caretaker repetition in a playful sing-song tone.
4. Grateful response to collaborative giving, when Ch gives C something C expresses gratitude.

Respond to Ch learning Implementing

Since fairly large proportion of the child's utterances consisted of utterances expressing his knowledge, mother's utterance which responded to the child's knowledge expressing as well as knowledge seeking utterances were included.

1. Explicate more fully the child's request for information. Mother's utterance which gave elaboration to the child's expressed knowledge was also included. The latter case of utterances were marked explicate+ and distinguished from the original sense of Explicate.
2. Confirm or acknowledge recently acquired learning. Mother's utterance that confirmed the child's expressed knowledge without restating the content of the child's preceding utterance was also included. But mother's utterance simply consisted of "Ung" was not included. As mentioned in the category *Explicate*, mothers produced fairly large amount of utterances which reassured what the child had said without much intention of confirming or acknowledging the child's prior utterance. This type of utterances was marked Confirm+ and distinguished from the original idea of Confirm.
3. Supply new learning by answering Ch learning question. Utterance that simply answered the child's questions was also included.
4. Correct learning: Mostly, mother's correcting utterances consisted of two parts: negating and correcting parts. Due to phonetic pause, these two parts were likely to have been scored as two separate utterances. In that case, the two utterances were scored for one Correct learning utterance. Correcting utterance which had negating part only was excluded. But the utterance that had correcting part with omission of negating part was included.

In most cases, child's utterance was difficult to figure out whether it was an expression of his knowledge or a report about a thing that he saw. Child's utterance, for example, "Apple", can be an expression of his knowledge that it was an apple or a report that there was an apple. Since a fairly large amount of the child's utterances consisted of such single words, the following rules were applied to ease the confusion. Regardless the type of the child's preceding

utterance, if the mother's responding utterance carried a learning implementing sense, it was straitforwardly included in the category *Respond to Ch learning implementing*. If the mother's responding utterance was accompanied with a descriptive statement, it was included in *Respond to Ch report*. Exact imitation of the child's preceding utterance was in the former category.

Respond to Ch Reporting Communication

1. Explicate
2. Seek elaboration: Mother's utterance which provided an elaborated report about self, others or things on the child's request was also included and marked Seek elaboration + to distinguish it from the original sense.
3. Confirm: As mentioned in relation to Confirm subcategories in other categories, mother's utterance which was restricted to reiterating what the child had said was also included and marked Confirm + . Partial imitation of the child's preceding utterance was also included.

C. Spontaneous Speech

General Guideline

In the works of Schachter, a spontaneous talk was defined in such a way that an utterance was scored as a spontaneous talk if it occurred in the absence of a prior Ch communication to C. Thus, mother's utterance following the child's communication to others than the mother may be scored as a spontaneous talk. But the definition did not fit into the present context, because the interaction concerned in the present study occurred between the two parteners only, mother and child. Thus, in the present study, spontaneous talk was defined as follows: Mother's utterance which was not preceded by the child's preceding utterance was regarded as spontaneous talk. This implied that mother's utterance sequentially following the first responsive statement to the child's prior utterance was all scored as spontaneous speech.

On the other hand, if the mother's utterance immediately preceded by the child's utterance was semantically detached from the child's ongoing topic, so that the mother's speech intention behind the utterance was more likely to be spontaneous rather than responsive, the utterance was counted as spontaneous talk.

Restrict-Command

Regardless of whether it was a responsive or spontaneous talk, any utterance which had a restricting function was included. Mother's utterance which carried a sense of irritation, or anger was also included.

1. Unmodified
2. Substitute gratification: alternative, distractions, or fantasy channelization.
3. Postponed gratification
4. Partial gratification
5. Appeals to pride
6. Appeals to reward
7. Appeals to threat or punishment
8. Sympathy
9. Suggesting another person
10. Urging Ch to gratify himself

Activate

1. Induce participation: Strictly limited to the utterances which was produced to encourage the child when he/she was inactive or unoccupied. Mother's utterance suggesting a certain action or verbalization while the child was engaged in an activity was separately categorized.
2. Suggesting action or verbalization: Mother's utterance which suggested an action or

verbalization while the child was engaged in a certain activity was primarily included. Mother's utterance which intended to draw the child's attention was also included.

3. Induce change in activity

Reports on Ch

C described Ch actions, attributes, possessions, and experiences. Reports on others including the child himself were also included.

1. Specific interrogative
2. Specific declarative
3. General interrogative
4. General declarative

Provide knowledge or teach

1. Present knowledge: Labeling, naming, or word teaching was excluded.
2. Present word teaching: Utterances which were composed of single words were all included.
3. Present not word teaching: Utterances instructing how to proceed in a task were mainly fell into this subcategory.
4. Elicit knowledge: Questioning utterances which took a form of "What it is" mainly constituted the subcategory.

Some of the questioning utterances which intended to elicit knowledge was presented in such a way that the answer could be a description or a report of thing. For example, an utterance like "What is this fish doing?" tends to elicit a descriptive statement from the child. This type of utterance which implicitly induced a report on the part of the child was not included in the present subcategory and separately marked in Report. Mother's utterance simply saying "This?", which implied "what is this?" was not included.

Report

Mother's utterance inducing a report about a thing on the child's part was also included. And such utterance was separately marked Inducing report.

1. Self .
2. Others
3. Things: An utterance like "Look at this!", which was produced simply to draw the child's attention was not included.

APPENDIX 4

TURNABOUT

[11]

The basic scoreable unit was an utterance. Thus, all the judgement was primarily centered on an independent utterance. In other words, any inference of the meaning of an utterance in conjunction with other utterances was not encouraged, unless there appeared a clear and distinctive semantic cue leading to such inference. For example,

M: Say apple. Apple, apple, apple.

The repeated utterances can be understood only in the context of the original utterance. From the ongoing context, it is felt that the mother is inducing the child to verbalize the word 'apple'. But when the repeated utterances are detached from the context, they do not carry the sense of Mand any more. Such words were not considered mand.

Non-verbal communication was also included. Mother's utterance which suggested the child to perform a certain behaviour or that responded to the child's behaviour was taken into consideration.

A. Response

An utterance was considered a Response if any part of it met one of the following criteria. [12]

1. Answering a question, correctly or incorrectly.
2. Self-repetition when solicited by the other.
3. Repetition or paraphrase of the other's most recent turn.
4. Requests for clarification.
5. Substantive continuation of topic. This could take many forms, including: one pointed to an object(mand) and the other named it (response); one said "Soup" and the other said, "What kind?" (both response and mand); or one said "Bear," the other said "Yeah"

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[11]Kaye and Charney's concept of turnabout was used. But R and RM were further categorized into R- and RM- in order to detect the mother's simple responding and turnabout turns.

[12]The criteria were adopted from Kaye and Charney's work (1980).

(response) and the first said "He's running" (response because the referent of "He" was a topic acknowleged by the other).

6. Certain intrinsically responsive expressions ("Yeah," "Uh-huh") and gestures (looking where other has pointed, accepting an offered object).
7. Any turn beginning with "And," "But," or "Because" (the syntax inherently continues a topic either introduced or acknowledged by the other). In this case, it was not required that the topic actually have been acknowledged: If a mother said " A bear" (pause) "And a dog," she was behaving as if her topic had been acknowledged.
8. Any act or utterance continuing a cadence, as when the two participants engaged in naming pictures for one another in rhythmic alternation.
9. Commenting on the other person's behaviour. However, referring to something the other was not doing was not considered a response.

Besides the Kaye and Charney's definitions of reponse, the following rules were also considered.

1. Response to the child's no-response, which usually took the form of maternal repetition was not considered a Response. Mother's communication composed of several utterances was individually referred to the child's most recent utterance. In such an individual reference, if any of the mother'a utterance seemed to be responsive to the child's preceding utterance, it was regarded as a Response.
2. When the child's utterance simply consisted of a word like "Ung", the mother's preceding utterance was substituted to infer the full meaning of the child's utterance. When the child's preceding communication was presented in a couple of separate utterances, mother's utterance was allowed to be referred to any of them.
3. Mother's utterance which simply acknowledged the fact the child had said something and continued the topic without actually responding to the child's preceding utterance was not thought as a Response. For example,

M: What is this?

C: Apple.

M: What is that?

The second utterance of mother was produced on the mother's assumption that the child had answered her question and the answer was right. And she wanted to carry on to the next topic. Since the mother's utterance did not have any connection to the child's preceding utterance by itself, however, such utterance was not regarded as a Response. Response which was simply composed of "Ung" was separately marked as R-.

B. Mand

Utterance was considered a mand if it met any of the following criteria, [13] regardless of whether or not it was also a response.

1. Question syntax or intonation
2. Command or request explicit or implicit, verbal or by manipulation.
3. Pointing or calling attention to something not already the current topic.
4. Offering an object.
5. A very expectant look, as if to way "Well?" or "Am I right?"

Basically, mother's utterance which functioned to induce the child to take a next turn was considered a mand. An utterance which introduced a new topic or information, but was presented in such a way that it did not invite the child to take the next turn was not regarded as Mand. Action inducing utterance was also included.

C. RM:Response + Mand

Mother's utterance which responded and simultaneously induced a response from the child was counted. Mother's assuring utterance like "Ah?", which took a considerable portion of RM was separately marked RM-.

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[13]Adopted from Kaye and Charney's work (1980).

APPENDIX 5

MOTHER AND CHILD SPEECH SAMPLES: SCORING PROCEDURES

Exact imitation

1. M: What is this?

   C: Bear.

   M: Bear?

2. M: Where?

   C: This.

   M: This?

Partial imitation

1. C: This circle.

   M: Circle?

2. C: Mom, I look at the books.

   M: Look at the books?

3. C: Everybody is sleeping.

   M: Yeah, sleeping.

Transformed imitation

1. C: I saw snow.

   M: Did you see snow?

2. C: Look at this.

   M: Do you want to look at this?

Paraphrase imitation

1. C: I did ...like this ...this.

   M: You wore it like this?

2. C: I wonder what this is.

   M: What do you think it is?

Incomplete expansion

1. C: Piano.

   M: There is a piano.

2. C: Corns.....hot

   M: Corns are hot?

Elaborate expansion

1. M: Try the telephone.

   C: This?

   M: Yeah.

   C: To whom?

   M: Whom do you want to phone?

2. M: Did you see the snow?

   C: Yeah.

   M: How was it coming?

   C: Like this.(action)

   M: It came like this?(action)

Noun-phrase extension

1. C: I saw ants.

   M: Where were the ants?

2. M: What is this?

   C: Warm.

   M: What kind warm is this?

Predicate extension

1. C: We did this.

   M: How did you do it?

2. C: We didn't drink Coke.

M: Why didn't you drink it?

Paraphrase repetition

1. M: This is a rabbit.

   C: Yeah.

   M: What is it doing?

   C: Ah?

   M: What is it eating?

2. C: I'm going to see this.

   M: You're going to see this?

   C: Yeah.

   M: What are you going to see?

   M: Which one are you going to see?

Exact repetition

1. M: What is this?

   C: Ah?

   M: What is this?

2. M: This?

   C: Yeah.

   M: Zuccini.

   C: Ah?

   M: Zuccini.

Partial repetition

1. M: Let's see what else there is.

   C: Yeah.

   M: Let's see....

2. M: Can you wear it alone?

C: Yeah.

M: Alone?

Transformed repetition

1. M: Why don't we look at this?

   C: Yeah.

   M: Ok. Let's see this.

2. M: What is this? How about this?

Synergistic sequences

1. C: We have to go without wearing this coat.

   M: Going without wearing it?

   C: Yeah.

   M: Then, what do you have to wear?

2. M: Did you see this?

   C: Yeah,

   M: This is an ant.

   C: Yeah.

   M: Have you seen an ant?

Respond to Ch expressive communication

1. Explicate

   a. M: Do you want me to buy it?

      C: Yeah.

      M: (Rather)Ask your Dad.

      C: No.

      M: You mean you want me to buy it?

2. Seek elaboration

   a. C: Where did you put the thing ?

M: Here (it is).

C: No...a smaller one.

M: Here is the smaller one.

C: No...

M: Then, which one (are you looking for)?

3. Confirm

   a. C: Oh my...

      M: Oh boy.....

4. Seek to alleviate negative feelings

   a. C: This one doesn't work...

      M: I'll fix it.

Respond to Ch desire implementing communication

1. Explicate

   a. C: This..this..

      M: Do you want to see this?

2. Seek elaboration

   a. M: Do you want to see other book?

      C: Yeah.. other books.

      M: What kind of "other" book?

3. Fulfil the desire with accompanying speech

   a. C: Where is the lid?

      M: Here it is.

4. Assist child to fulfil his own desire

   a. C: I want to do this.

      M: Which one?

      C: This...

      M: OK.... turn it around and try..

5. Disinhibit desire

   a. C: Mom..this (pointing an object)

      M: OK..OK.. go ahead.

Respond to child ego-enhancing communication

1. Ego-boosts by affirming child boast

   a. M: Are you feeling shy?... give me some of those..

      C: I'm going to make some for you.

      M: Is that right?...(then)make and give me some.

2. Provide justification for ego blow

Respond to collaborative communication

1. Participate in collaborative dramatic play

   a. C: It's Mom.(over phone)

      M: Mummy?... does she want to talk to you?

2. Participate in role-differentiated Ch project or discussion

   a. C: Right here.

      M: You are going to put it here.

   b. C: Mom, here is another one.

      M: Do you want to put this one here?

3. Engage in collaborative chanting

4. Grateful response to collaborative giving

   a. C: Here is some for you.

      M: Thank you.

Respond to Ch learning implementing

1. Explicate

   a. C: Mom, what is this?

      M: You mean what this is for?

b. C: Mom, do you eat this one time?

M: You mean you eat this one only?

2. Explicate +

a. C: Gun.

M: Is that a gun?

3. Confirm or acknowledge

a. C: This is a bag.

M: Yes, it it a bag.

b. C: Mom, this is water.

M: Yes, it is water.

4. Confirm +

a. C: This is something hot?

M: Something hot?

b. C: Mom, is this a corn?

M: Corn?

5. Supply new learning

a. C: What is this?

M: Drum.

b. C: Mom, this.

M: This is a fly.

6. Correct learning

a. M: What is this?

C: A hat.

M: (No) It is a muffler.

Respond to Ch reporting communication

1. Explicate

a. C: Piano.

M: There is a piano.

b. C: Where is my grandmother?

M: Do you mean where your grandmother is?

c. M: What is this?

C: Swimming.

M: Swimming?

C: Yeah.

M: This is an ant.

C: Ant.

M: The ant is swimming, isn't it?

2. Seek elaboration

a. C: I didn't drink coke.

M: Why you didn't drink coke?

b. C: Here it is.

M: Where?

3. Seek elaboration + (elaborate)

a. M: Yeah, this is a pair of pants.

C: Yeah, pants.

M: You wear a pair of pants.

b. M: Hat.

C: Yeah, hat.

M: Wearing a hat.

4. Confirm

a. C: This ...playing violin.

M: Yes, it is playing violin.

b. C: Mom... pare... the apple.

M: Yeah, Mom pares the apple.

5. Confirm +

   a. C: This... grandmother bought.

      M: Grandmother bought it?

Restrict-command

1. Unmodified

   a. C: Mom, this....

      M: No.

2. Substitute gratification

3. Postponed gratification

4. Partial gratification

5. Appeals to pride

6. Appeals to reward

7. Appeals to threat or punishment

8. Sympathy

9. Suggesting another person

10. Urging Ch to gratify himself

Activate

1. Induce participation

   a. M: You don't make a train?

      C: Ah?

      M: Why don't you make a train?

   b. M: Let's look at this.

2. Suggesting action or verbalization(General activation)

   a. M: Are you singing a song?

      C: Yeah.

      M: Keep going.

C: (sing a song)

M: Try another one.

3. Induce change in activity.

a. C: (playing with telephone set)

M: Why don't you build a house with these bricks?

Report on Ch

1. Specific interrogative

a. C: I'm going to play a house.

M: Playing a house.. with whom?

b. C: The thing that you took away.

M: This?

C: Ah..Ah.. that you took...something like this.

M: There it is. Were you looking for it?

2. Specific declarative

a. C: Hello..hello (over phone)

M: You're keeping on making phone calls only.

3. General interrogative

a. M: See..look at this..where are you going? ...see this...you're not going to read this?

4. General declarative

a. M: Turn it around.

b. C: Ah? (action)

M: Ok..you did well.

Provide knowledge or teach

1. Present knowledge

a. C: One, two, three, four, five, six.

M: Are there six?

C: Yeah.

M: (No) There are four.

b. C: This is something to hang like this.

M: Something to hang like this?

C: Yeah.

M: Do you think it is a rope?

C: Yeah.

M: This is for counting figures.

2. Present word teaching

a. M: It sounds ding dong...

C: Yeah.

M: Xilophone.

b. C: How about this?

M: This...

C: Yeah.

M: Something sounding like this...

M: Ambulance.

3. Present not word teaching -

4. Elicit knowledge

a. C: This is pretty.

M: Is that pretty? What is this,then?

b. C: This is ugly.

M: Ugly?

M: What is this then?

Report

1. Self

a. C: This is supposed to be put here.

M: Is that right? I didn't know that.

b. M: There is no spoon.

M: Ok... I'm going to make something nice for you.

2. Others

a. C: Whose is this?

M: Whose is this? This belongs to Young-sun.

3. Things

a. M: You're not going to see this? ...this is pretty.

b. C: Let's see something else.

M: Look at here.. here are a lot of things

4. Inducing reports

a. C: Baby.

M: Baby?..what is that baby doing?

b. C: This is a pig.

M: Yes, you are right. The pig is oinking

R(response turn)

1. M: What is this?

C: Squarrel.

M: No, it is a kangaroo.

2. C: What is this?

M: Monkey.

R-

1. M: Lion.

C: Lion.

M: Yeah.

M(mand)

1. M: See.. does't it look alike?

   C: Yeah.

   M: What is this then?

RM(turnabout)

1. M: This is an ant.

   C: Ant.

   M: Is that ant swimming?

2. M: What is this looking at?

   C: Ah?

   M: This(dog) is looking at himself reflected in the water, isn't it?

3. C: It's red.

   M: Red?

4. C: You have to put this one here.

   M: Do you think so?

RM-

1. C: What is this?

   M: Ah?